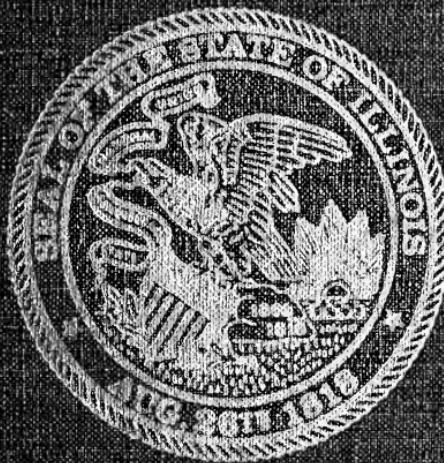


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A HISTORY
OF
THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH
1927 — 1962

By
B. K. RICHARDSON, A.B.

Under the Direction of
FRANKLIN D. YODER, M.D., M.P.H.
DIRECTOR OF PUBLIC HEALTH



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ISAAC D. RAWLINGS, M.D.
Feb. 3, 1921 — Feb. 14, 1929



THOMAS H. LEONARD, M.D.
Feb. 15, 1929 — Mar. 31, 1929



ANDY HALL, M.D.
Apr. 1, 1929 — Jan. 24, 1933



FRANK J. JIRKA, M.D.
Jan. 25, 1933 — Oct. 23, 1937



ALBERT C. BAXTER, M.D.
Oct. 24, 1937 — Oct. 18, 1940



ROLAND R. CROSS, M.D.
Oct. 19, 1940 — Nov. 28, 1959



B. K. RICHARDSON
Nov. 28, 1959 — Jan. 31, 1960



L. L. FATHERREE, M.D.
Feb. 1, 1960 — Aug. 31, 1961



FRANKLIN D. YODER, M.D.
Sept. 1, 1961 —

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INTRODUCTION

This account deals with the affairs of the Illinois Department of Public Health for the years from 1927 to 1962. The story of the State's health agency from its inception in 1877 up to the beginning of this period is told in *Rise and Fall of Disease in Illinois*, a two-volume work published in 1927. At that time the Department of Public Health, as such, was only ten years old. It had been created on July 1, 1917, replacing the State Board of Health. It is one of fifteen departments of the State government which function under the direct administrative control of the Governor and which together comprise the principal operating agencies prescribed in the Civil Administrative Code. At the head of each of these departments is a director, appointed by the Governor, and each is a member of the Governor's Cabinet.

The *Director of Public Health*, whose legally required qualifications, as of 1961, include a license to practice medicine and surgery in Illinois, a Master's Degree in Public Health and certification by the American Board of Preventive Medicine in Public Health, is entirely responsible for the operation of the Department of Public Health, both as to policy and program. To help him in these respects, in addition to staff personnel, there was created by law at the outset a non-executive Board of Public Health Advisors appointive by the Governor. From time to time since 1917 other non-executive boards for the same purpose have been provided for by law until in 1962 there were eight such agencies appointive by the Governor and one appointive by the Director. The Director exercises the privilege, moreover, of appointing on his own initiative such advisory committees as may be helpful in dealing expertly with special problems such as premature baby service, venereal diseases and the use of new vaccines and other biologics. The titles and the number of members of the legally created boards in the Department are as follows:

1. Board of Public Health Advisors.....	9
2. Advisory Board of Cancer Control.....	7
3. Advisory Hospital Council.....	18 (3 ex officio)
4. Advisory Board on Necropsy Service to Coroners	9
5. Hospital Licensing Board.....	7
6. Plumbing Advisory Board.....	7 } 4 appointive by Governor 7 } 2 appointive by Legislature 1 ex officio
7. Northeastern Illinois Metropolitan Area Air Pollution Control Board.....	7 } 6 appointive by Governor 1 ex officio

8. Radiation Protection Advisory Council 9 (2 ex officio)
 9. Advisory Council on Homes for Ill and
 Physically Infirm Persons _____ 12 } 11 appointive by Director
 12 } 1 ex officio

As an extra-departmental responsibility, the Director of Public Health is legally an ex officio member of several inter-departmental and inter-state boards and commissions. Among these are:

1. The State Sanitary Water Board
2. The State Water Resources and Flood Control Board
3. The State Commission on Handicapped Children
4. The Ohio River Valley Water Sanitation Commission

Employees of the Department, with only a few minor exceptions, are subject to civil service and merit system laws which favor the recruitment of well-qualified people and encourage stability of employment. Almost without exception, the professional and technical personnel are highly trained for their respective duties and many qualify easily as experts. Both in-service and on-campus specialized training have been encouraged by the Department, especially since 1935, through the arrangement of on-duty study groups and by awarding scholarships to qualified applicants. Several hundred persons have taken advantage of these opportunities. The total number of employees in the Department was about 170 in 1927 and about 1,100 in 1962, the latter including about 425 on duty in two state tuberculosis sanatoria. Because the activities of the Department, except the operation of two tuberculosis hospitals, have been financed in part since 1935 by Federal funds, employees are prohibited by Federal law from participating actively in party politics.

The growth of the Department between 1927 and 1962 is suggested by the amount of money placed at its disposal. Appropriations of state funds to the Department for the two years at the beginning and at the end of this period were as follows:

Biennium	Appropriation
1927-1929	\$ 1,289,384
1961-1963	19,538,579

In addition to state money appropriated for the 1961-1963 biennium there was available to the Department \$17,444,079 in Federal grants, of which \$12,578,892 was for the construction of community hospitals. The total budget for the two years ended June 30, 1963 was \$36,982,658.

Special funds from both the state and federal governments, in addition to regular appropriations and allotments, have been made available to the Department from time to time for use in connection with emergency or unanticipated problems, such as unemployment, flood and drought disasters, and public works projects. Altogether, the money

expended directly by the Department, or only after its approval, has run well into multiple millions of dollars annually during much of the period covered by this narrative.

The basic law under which the Department operates and which remains in the statutes practically unchanged since first adopted in the State Board of Health Act in 1877 is expressed in a single sentence. It reposes in the Department the authority "*To have the general supervision of the interests of the health and lives of the people of the state.*" The numerous other items in the law prescribing the powers and duties of the Department are elaborations of this all-embracing authority and spell out specific responsibilities with respect to such subjects as water supplies, sanitation generally, public health laboratories, vaccines and sera, hospitals, nursing homes, swimming pools, sewage disposal, etc.

The principles on which modern public health service is based were well established by 1927 but acceptance of the philosophy of practice was far from universal. Although the state maintained an active and dedicated Department of Public Health, its impact on the population at large was so feeble that such easily preventable diseases as diphtheria and smallpox were widely prevalent and needlessly so. There was little popular interest in the establishment of efficient local health departments, nor was there support for a state agency strong enough to provide an adequate public health service for all the people. Legislative bills which would have authorized counties to establish and maintain health departments were defeated in the General Assembly in 1921, 1923, 1925, 1927 and 1929. Acceptance of the proposition that various communicable diseases, several of which were endemic, could be prevented by safe, inexpensive, practically painless scientific methods, and paying for the necessary services to bring about prevention were two entirely different things in Illinois in 1927. Changing this situation in a favorable way was the job and the challenge of the State Director of Public Health.

That responsibility was entrusted to nine different men during the period under discussion, albeit that only three served in that position for as long as four years or more each. The names of these nine men and the tenure of each are as follows:

1. Isaac D. Rawlings, M.D., February 3, 1921-February 14, 1929
2. Thomas H. Leonard, M.D., February 15, 1929-March 31, 1929
3. Andy Hall, M.D., April 1, 1929-January 24, 1933
4. Frank J. Jirka, M.D., January 25, 1933-October 23, 1937
5. Albert C. Baxter, M.D., October 24, 1937-October 18, 1940
6. Roland R. Cross, M.D., October 19, 1940-November 28, 1959
7. B. K. Richardson, November 28, 1959-January 31, 1960
8. L. L. Fatherree, M.D., February 1, 1960-August 31, 1961
9. Franklin D. Yoder, M.D., September 1, 1961.

The development of public health service in Illinois and the achievements of the State Department of Public Health are the reflections largely of the character and attitudes of these men. The administration of each is followed chronologically in the chapters which follow.

THE RAWLINGS ADMINISTRATION 1921 - 1929

When Dr. Isaac D. Rawlings, an exceptionally well-qualified health officer who was completely devoted to his profession, accepted appointment as State Director of Public Health on February 3, 1921, he was ambitious to bring about a state-wide public health service no less efficient and effective than that of the city health department of Chicago, with which he had spent 20 years. This, he recognized, would require substantial increase of strength in the State Department of Public Health, sharp improvement in most of the city health departments and the establishment of full-time county health departments of which there were none in Illinois. The state, however, was far from ready to adopt a health program of such far-reaching magnitude. While people ruefully recalled the deadly influenza of 1918, what really seized onto popular imagination during the 'twenties were such things as the "flapper" rage, the stock market boom and hard roads. In 1920 there was hardly a mile of hard roads in rural Illinois and Len Small was elected Governor that year on the promise that he would build them—which he did during his eight years in office.

Although short of the goals set, progress in public health service along all three lines proposed by Dr. Rawlings was considerable and praiseworthy by the end of 1927. Appropriations to the Department of Public Health went up from \$720,810 for the biennium ended June 30, 1921, to \$1,289,384 for the biennium ended June 30, 1929. The Legislature failed to authorize the Department of Public Health to accept annual grants available after 1922 from the Children's Bureau of the Federal government for maternal and child health services on the grounds that Illinois was able to finance its own health services. This episode was used as a lever to obtain in 1927 an increase in appropriations sufficient to employ 10 additional public health nurses, a physician-specialist in health education for promoting health education in the teacher-training colleges, a dentist to promote programs of dental health and a food specialist. Previously 10 medical officers had been added to the field staff as district health superintendents and personnel had been added to all of the 10 divisions, except that of tuberculosis, into which the Department was organized. Not only was manpower added during these six years but efficiency of the Department had been stepped-up substantially by coordinating activities of the various divisions, noteworthy improvement in record keeping

and utilization of statistics and an outstanding advancement in health education through the use of newspapers, exhibits, popular pamphlets, a monthly magazine and the arrangement of such special events as an annual conference for public health workers and an annual Health Promotion Week. An outbreak of typhoid fever traced to eating contaminated raw oysters gave opportunity for using the powers of the Department to make rules and regulations in a new and far-reaching way (sale of uncertified raw oysters in Illinois was prohibited) that attracted national attention to the Department and resulted in establishing sanitary practices in the commercial handling of oysters generally. In these ways both strength and influence had been added to the State Department of Public Health by the end of 1927.

As to the improvement of city health departments, a study and appraisal of the 1925 public health facilities in the 15 cities ranging from 30,000 to 100,000 was made by Dr. Thomas Parran of the U. S. Public Health Service who was assigned at the time for duty in the State Department of Public Health. The report of this study, widely distributed, showed the strong and weak points in the program of each city, compared the services of each with those in the other 14 and made recommendations for improvement. This sharpened local interest in their health departments and provided specific proposals for improvement.

With respect to county health departments, which Dr. Rawlings believed to be basic for adequate service, the Legislature turned down in 1921 a bill that would have authorized counties to set up health departments. No law prohibited such departments, however. Through efforts of Dr. Rawlings and with financial aid from the International Health Board, the first full-time county health department was established in Morgan county in 1922. In July 1924, Crawford county set up a short-lived department and in the same year Cook county organized a health department in the welfare division to serve the rural parts of that county. In 1925 a county health department was organized in DuPage county and in 1927, with financial aid from the International Health Board and the U. S. Public Health Service, in Pulaski county. Only the ones in Morgan and Cook counties survived these beginnings, however, owing to a lack of specific legal authority for counties to appropriate money for operating full-time health departments. Legislative bills to authorize counties to maintain health departments were introduced in 1921, 1923, 1925, 1927 and 1929. In 1927 the bill passed the Senate and reached third reading in the House where opposition by the Chicago Commissioner of Health, who had previously endorsed it, and by the Illinois State Nurses Association because the phrase "graduate and registered" did not precede the word "nurses" in the bill, led to defeat.

These gains, all along the line, had been made by the end of 1927 when Dr. Rawlings was beginning his last two years as Director of

Public Health. At that time there were 170 employees in the Department of Public Health, about one-half of whom were clerical. The professional and technical personnel included 22 physicians, of whom 14 were district health superintendents who maintained offices in their homes scattered throughout the state; 13 public health nurses attached to the Division of Child Hygiene and Public Health Nursing and stationed in the field except for the chief; 16 bacteriologists and analysts attached to the diagnostic and research and the water laboratories; 8 sanitary engineers and 2 milk sanitarians in the Division of Sanitary Engineering; a dentist, a health educator and 18 inspectors. The Department owned one automobile, a Model T, and travel out of Springfield was almost entirely by train.

GAINS CONSOLIDATED

Dr. Rawlings spent the last two years of his incumbency in consolidating the administrative gains he had initiated and in pin-pointing as to magnitude and local geographic importance the principal public health problems which were ripe for solution. A detailed analysis of mortality statistics, over a seven-year period, with emphasis on communicable diseases and on infant and maternal deaths, was made early in 1928. The results of this study were concentrated programs of immunization against diphtheria and smallpox and the organization of mothers' clubs in selected areas where the need was greatest. These projects were stimulated and guided for the most part by nurses from the State Department of Public Health who devised all sorts of schemes for financing the local costs which were limited to paying the cooperating doctors. The vaccine and toxin-antitoxin was provided free by the state in line with established policy. The immunizations were done on a mass basis, usually at a school, to which children were brought by the scores and hundreds. In some places the doctors did this work free as a civic duty; in other places they accepted a modest per diem fee; in still other places they charged a small per capita fee.

Also early in 1928, to express its continuing interest in tuberculosis, although the state government had steadfastly refused during 30 years to provide the state health agency with money for combatting that universal plague, the State Department of Public Health made an inspection and appraisal of the 15 county tuberculosis sanatoria which had been built under the provisions of the county sanitorium law, enacted in 1915. This study, along with the statistics on tuberculosis, revealed that much more and better work was needed in that direction. Indeed the whole question of tuberculosis, which still caused upwards of 5,000 deaths annually in Illinois, was under constant study and a confidential proposal that the State Department of Public Health take over and administer the Illinois Tuberculosis and Health Association, a voluntary agency, was seriously considered by the State

Board of Public Health Advisors at a meeting on March 3, 1928 and again at a meeting on September 3, 1928. A proposal for launching a campaign aimed at obtaining an appropriation sufficient to establish a strong instead of the "in-name-only" division of tuberculosis in the Department was also considered at this meeting. Although nothing came of these proposals, their consideration is evidence that there was concern in the Department about tuberculosis and that efforts were made during this period, as they had been many times previously, to break through the long-standing practice of the Legislature to turn down appropriations for tuberculosis.

The rapid increase of toxic chemicals in manufacturing processes led to the appointment of a medical-industrial inspector in 1928 and the signing of an agreement shortly thereafter by the State Director of Public Health, Dr. Rawlings, and the Commissioner of Health of Chicago, Dr. Arnold H. Kegel, to set up a jointly financed bureau of industrial hygiene. This agreement was never implemented, but the medical-industrial inspector was retained by the state until a Division of Industrial Hygiene was created in the Department of Public Health some years later.

At the annual conference of Illinois Health Officers and Public Health Nurses on October 15 and 16, 1928, at Chicago, there was adopted unanimously by the large delegation a resolution highly commending Dr. Rawlings and the State Department of Public Health for the work done and accomplishments attained. Excerpts from the preamble and the resolution read as follows:

"Whereas, the State of Illinois now enjoys a degree of favorable health conditions unsurpassed in any other period of her history and unsurpassed by that prevailing in any other state of equal density in population; and . . .

"Resolved, by the conference of Illinois Health Officers and Public Health Nurses here assembled, That the present organization of the State Department of Public Health, and particularly its Director during the afore-mentioned period, Dr. Isaac D. Rawlings, be heartily commended for the faithful and efficient discharge of duty; and be it further

"Resolved, That the conference endorses the constructive program and practical policies laid down and ably carried forward by Dr. Rawlings; . . ."

A number of national and international public health leaders, including Dr. George Frederick Buchan, President of the Society of Medical Health Officers of England; Dr. Frank Boudreau, Director of the Health Section of the League of Nations at Geneva, Switzerland; Dr. C. E-A. Winslow, Professor of Public Health at Yale University; Dr. Hugh S. Cumming, Surgeon General of the U. S. Public Health Service; Dr. George H. Bigelow, Health Commissioner of Massachusetts;

Dr. J. L. Pomeroy, Health Officer of Los Angeles; Eunice H. Dyke, R.N., Director of Public Health Nurses of Toronto, who appeared on the conference program had attracted a capacity audience.

In January 1929 began the publication of the *Illinois Health Messenger*, a bi-weekly newsy house organ of the State Department of Public Health which replaced the monthly bulletin, *Illinois Health News*. Also started at that time was *Illinois Health Quarterly* which featured scientific articles and reports on public health.

The Rawlings regime ended on February 14, 1929, when his resignation was accepted by Governor Emmerson who designated Dr. Thomas Leonard, assistant director, as the caretaker Director pending a permanent appointment. Dr. Leonard was relieved of that duty on April 1, 1929, when the appointment of Dr. Andy Hall as Director became effective.

DR. HALL'S ADMINISTRATION 1929 - 1933

A fellow townsman of newly inaugurated Governor Emmerson, son of a captain in Grant's army and himself a veteran medical officer of the Spanish-American War, the Philippine Insurrection and World War I, Dr. Andy Hall, third Director of the Illinois Department of Public Health, was the epitome of personal integrity, easily the most revered citizen and former Mayor of Mt. Vernon, prominent in local and state medical affairs, and a staunch believer in home rule and private enterprise. Since graduation from the medical college of Northwestern University in 1890, he had practiced medicine in Mt. Vernon, and was 64 years old when he became State Director of Public Health on April 1, 1929 with the solid endorsement and support of the Illinois State Medical Society. He didn't know it at the time, but ahead were 32 more years of vigorous life, and he would be selected by the American Medical Association on December 6, 1949 as the outstanding general practitioner of the year in the United States. He was an ardent fisherman, liked horse racing, loved to make speeches, and never missed a Mt. Vernon high school basketball game. He had a rich store of quaint stories which he told with relish.

New to state government and only casually acquainted with the developments and complexity of state and federal public health machinery, he was not a little surprised, upon taking office, at the number and technical attainments of the personnel and the ramifications of the activities of the State Department of Public Health.

The General Assembly was in session at the time of his appointment, and Dr. Hall gave his first and immediate attention to legislation. He made no effort to cause the introduction of a bill on county health departments, prepared by the previous Director, but gave his support to two pending bills, in addition to the Department's appropriation bill, which turned out to be laws of immense importance to the sanitation phases of public health administration. One created the State Sanitary Water Board, an inter-departmental agency of which the Directors of Agriculture, Conservation, Public Health and Public Works are *ex officio* members and the chief state sanitary engineer the *ex officio* technical secretary. Clothed with broad powers concerning the abatement and prevention of stream pollution, this Board, the elected chairman of which is traditionally the Director of Public Health, functions in practice as an arm of the Department of Public Health which executes its orders.

The other law makes it the duty of sanitary districts, local official agencies concerned with sewage disposal, to install sewage treatment plants. Implementing this law became the function of the Department of Public Health.

Dr. Hall inherited, as Director, a well organized, a well staffed Department capable of making a substantial impact on the public health problems of the state although too small to provide an adequate public health service for 7,500,000 people. There were about 175 employees organized into 10 divisions, but the effective strength which could be brought to bear on downstate problems was not quite as great as these statistics indicate. The Division of Lodging House Inspection, for example, a semi-political relic left over from the late nineteenth century when the great influx of immigrants resulted in severe over-crowding in Chicago, had 11 employees who functioned only in Chicago along lines of minor influence on the public health. The Division of Tuberculosis was at that time only a paper organization of which the assistant director of the Department was the nominal chief. Otherwise, the division chiefs, mostly young and ambitious, measured up fully to the best in the nation in their respective fields and the personnel generally was competent and dedicated. There were 12 doctors and 12 nurses available for regular field duty. Dr. Hall decided at once to make no radical changes in the organizational structure or personnel but to press forward with maximum effort toward the solution of public health problems on a policy of (1) close cooperation with the Illinois State Medical Society and other voluntary health agencies, (2) strict observance of the home rule principle in governmental affairs, and (3) the limitation of the Department's activities to preventive measures except for the operation of 26 venereal disease clinics where indigent patients were treated free and which had been established originally only after approval by and the promised cooperation from the local medical societies. This type of direct service Dr. Hall approved, but he took no active interest in building up or establishing local public health departments.

EMERGENCY PROBLEMS:

There were no ominous storm-clouds visible on the public health horizon in April 1929 and the newly installed administration at Washington had promised a chicken in every pot and two cars in every garage. True enough the considerable prevalence of smallpox in Illinois at that time astonished Dr. Hall who regarded it almost as a personal affront, but that was a situation which surely could be dealt with. Thus, it seemed entirely warranted to look forward toward an uneventful and tranquil administration of the Department of Public Health. This was not to be. Beginning before the first year was out, crisis followed crisis, not of administrative origin, but brought on by

sociological and natural phenomena and which created problems of the first magnitude.

First, on black Thursday in October 1929, the stock market collapse ushered in the great economic depression which brought with it a terrible experience of unemployment, poverty and misery. The next year, 1930, a withering drought in the middle west devastated the crops, gardens and pastures of 40 southern Illinois counties, which were struck with particular severity, complicating enormously the already serious effects of the depression. Poliomyelitis, which had been almost quiescent in the state for nearly a decade with only 82 reported cases in 1929, turned sharply upward in 1930 with 402 cases reported and reached a new high for Illinois of 700 cases in 1931. Then in July and August 1932 a strange exotic disease, epidemic encephalitis, broke out for the first time in Illinois in the little town of Paris where 27 persons, mostly elderly, were stricken with the malady causing no little alarm locally. Above all, the prevalence of smallpox and diphtheria, both subject to complete and relatively easy prevention, turned sharply upward in 1929.

Health departments are inured to the unexpected and are prepared to meet ordinary emergencies head-on, but these phenomena, especially the poverty and misery spread broadcast by the economic depression and the drought, were indeed a challenge of the first magnitude to the State Department of Public Health. Dr. Hall met them in much the same attitude of a military commander faced by unexpected contingencies. He discussed matters thoroughly with division chiefs and the Board of Public Health Advisors, decided on a course of action and pursued it with vigor. The members of the Board at that time were:

Dr. W. A. Evans, Health Editor, Chicago Tribune

Dr. Arnold H. Kegel, Health Commissioner, Chicago

Dr. Clifford U. Collins, Peoria

Dr. R. J. Coulter, Mattoon

Dr. James H. Hutton, President-Elect, Chicago Medical Society

As to poliomyelitis, the Department undertook for the first time to obtain convalescent serum and distribute it free to doctors for the treatment of patients early after onset of the disease, a therapy found some years later to be ineffective but popular at the time because of the belief that it prevented paralysis. Also, careful epidemiological studies were made of as many cases as possible in search of knowledge useful in preventing this crippling disease which obviously was transmissible by mysteriously so. Thus the polio emergency was met with no evidence, when it subsided, that a single case had been prevented. More information about the disease had been accumulated and this might be helpful later.

With respect to the epidemic encephalitis, an epidemiological study was all that could be done because of universal ignorance about

that disease and this was done with great care in Paris. Like polio, this type of encephalitis was obviously transmissible but nobody knew how and the study sought to discover some food or insect vector or personal contact common to the 27 patients which might explain the riddle. A year later, a follow-up study showed that of the 27 original cases, 9 died, all but one within 10 days after onset of attack; 13 made apparently complete recovery; 2 recovered with nervous system impairment; one recovered complete mental faculties but lost control of the arms and legs; another was an invalid and no record of one could be found. The report on the Paris outbreak proved to be very interesting and helpful to federal and other state epidemiologists in 1933 when an extensive outbreak of epidemic encephalitis developed in St. Louis and vicinity with scattered cases in Illinois.

OTHER PROBLEMS AND ACTIVITIES

These two crises were merely anti-climatic episodes which complicated the main stream of health problems associated with the economic depression and the drought-stricken area of southern Illinois. With no legal authority and no money for providing direct relief, the Department of Public Health intensified its efforts on the prevention of diseases along established and well proved lines—vaccination against smallpox, immunization against diphtheria, sanitation of water and milk supplies and the promotion of adequate low-cost diets—concentrating efforts in the most vulnerable localities. A special drought-emergency grant to the Department from the Federal Public Health Service led to the employment of 25 extra workers, including 6 doctors and 12 nurses, who were assigned to duty in the drought-stricken counties in April 1931 and remained until July 1932. Noticeable improvement in the prevalence of preventable diseases followed this intensified campaign. Neither smallpox nor diphtheria ever again reached the prevalence level of 1929, but progressively declined as time went on to the vanishing point. Typhoid fever, more stubborn, trended downward thereafter as did infantile diarrhea, indicating substantial improvement in the sanitation and preparation of foods, especially milk, and water supplies.

Much attention was paid to maternal and child health. Medical societies were prodded about the situation, especially in counties with excessive maternal and infant death rates; surveys were made and program recommended; young mothers' clubs were organized; breast feeding demonstrations were promoted; information about the situation was transmitted to the public through newspapers, the lecture platform, the radio, and the publications of the Department. A series of 4 institutes on maternal hygiene for nurses was conducted in April 1931.

All of these pressing matters demanded and received the primary attention and the main energy of the Department, but the spectrum

of the public health field is broad and numerous other problems were attacked or at least explored during Dr. Hall's tenure. Some were new, at least in administrative action.

Two of these new ventures resulted within a few years in the practical elimination of trachoma and malaria from southern Illinois where they were endemic at the time and causing, in the case of trachoma, a good deal of blindness. The trachoma work started out in June 1930 as a joint project in which the U. S. Public Health Service, the Illinois Society for the Prevention of Blindness and the State Department of Public Health participated. Diagnostic clinics were set up in Gallatin, Saline, Union and Williamson counties where the disease seemed to be centered, as reflected by the number of pensioners (62) blinded by trachoma. By December 1930, about 200 treatable patients had been discovered and transported to the state infirmary in Chicago for treatment, necessary money having been released by the Governor from his contingency appropriation. Later, treatment clinics were set up and operated in the area by the Department of Public Welfare and continued for several years until the problem no longer required special attention.

The malaria project, in which the U. S. Public Health Service participated, was started in March 1930 with public meetings sponsored by the local medical societies at Anna, Benton, Cairo, Harrisburg and Murphysboro where the problem and the mains of solution were set forth by lectures and motion pictures. This step was followed in April 1931 with the assignment by the Department of a field party consisting of a doctor, a sanitary engineer and three inspectors whose duty was to promote (1) diagnostic examinations through laboratory procedures, (2) the extermination of mosquitoes through drainage and oiling, and (3) the screening of homes, particularly by using a low-cost plan whereby effective screens could be installed at \$10 to \$12 per house. Here again the project, as a special activity, continued for several years until malaria ceased to be a threatening problem and preventive practices were well established among the people concerned and kept alive by local health departments of later inception.

Among other accomplishments and exploratory efforts of the Department during Dr. Hall's tenure are the following:

1. A state-wide survey of physically handicapped children, executed jointly by the state Departments of Health and Welfare and the Superintendent of Public Instruction during 1929 and 1930, identified 10,011 crippled children in 64 counties and revealed that poliomyelitis was responsible for 23 per cent of the disabilities.

2. In 1930, the Department of Public Health made a house-to-house canvass of one per cent of the population in every county for the purpose of finding out how many cases of notifiable diseases had occurred during the previous year in the households concerned. This

survey revealed deficiencies ranging up to 60 per cent in the official reports.

3. In July 1931, an undulant fever committee, consisting of 4 physicians, 2 veterinarians and a bacteriologist, was appointed to study that disease, which was on the increase, and recommended a control program.

4. In November 1931, a medical officer from the Department's staff, an industrial hygienist, was assigned to open and operate a diagnostic clinic for occupational diseases at the research hospital of the Medical College of the University of Illinois at Chicago.

5. The manufacture of biological products not readily available on the market was started in the Department's laboratories during 1931. These included such things as bacteriophage, popular at the time, antigens and culture media for free distribution to doctors and local laboratories.

6. Legislation promoted or favored by the Department in 1931 produced several amendments or new laws important to public health administration. One vested in the Department *supervisory* instead of *advisory* authority over public water supplies, and another gave it supervision over the construction and operation of public swimming pools. Another authorized municipalities, school boards and county boards to appropriate money for and employ public health nurses who were required by this law to be licensed as such. The vital statistics law was amended so as to increase the accuracy and completeness of death records.

A bill proposing compulsory vaccination against smallpox of school children and school personnel, introduced at the request of the Department in 1931, failed to pass. Likewise, the Department proposed the enactment of an automobile driver's licensing law, pointing out that fatal traffic accidents greatly exceeded those of any other type, but no such bill was introduced in 1931.

7. Plans were initiated in 1931 for the development of exhibits for display by the Department at the forthcoming World's Fair in Chicago in 1933.

8. Regularly scheduled radio broadcasts by the Department were started over Station WGN in Chicago on October 25, 1930, and over Station WCBS in Springfield on April 12, 1932. From this beginning, the Department later produced records which for several years were used weekly by practically all down-state radio stations.

9. Toxoid was adopted by the Department in 1931 to replace toxin-antitoxin as the recommended preventive of diphtheria.

10. A general revision of the quarantine rules and regulations, which prescribed new techniques of improved effectiveness against disease transmission while reducing hardships on families concerned, was published in March 1931.

11. A required course of health instruction was conducted by Department personnel at the DeKalb State Teacher's College in 1930.

12. On February 16, 1932, the State Board of Public Health Advisors adopted a resolution which strongly recommended that the Director of Public Health request the University of Illinois establish in its medical college a school of public health nursing.

Such were the events, the problems, the actions and the attitudes which commanded the attention and colored the administrative course of the State Department of Public Health during the incumbency of Dr. Andy Hall. Opportunities for practical public health services far beyond the limited reach of the Illinois Department of Public Health were opening up on all sides. While in no sense ignored nor minimized, token recognition was often about all that could be accorded many of these opportunities. Three fundamental factors were responsible for this situation. There was a severe shortage of persons trained in public health techniques; local public health departments were woefully inadequate; money to finance expanded programs was not available.

PERSONNEL

Effective February 1, 1930, Dr. Albert C. Baxter, a general practitioner of Springfield whose avocational interests were photography, boy scouts and automobiles, was appointed assistant Director of the Department of Public Health. Thomas G. Hull, Ph.D., who had served with distinction for about 10 years as chief of the division of laboratories, resigned on April 1, 1930, to accept a position with the American Medical Association. Dr. Lloyd Arnold of the faculty of the medical college of the University of Illinois assumed his duties until September 1, 1930, when Howard J. Shaughnessy, Ph.D., an able bacteriologist, was appointed permanently to the post. William F. Behrens was replaced on August 18, 1931, by Charles L. Gerds as superintendent of the division of lodging house inspection, and on October 1, 1931, Dr. Charles F. Harmon replaced Dr. C. C. Copelan as chief of the division of social hygiene. Otherwise, no changes were made in the administrative staff of the Department of Public Health during Dr. Hall's tenure. The total number of full-time regular employees in the Department increased from about 175 to about 185.

HOUSING

The headquarters office of the Department of Public Health was on the ground floor of the State House just off the east entrance on the south side, one of the most desirable spots in the building inherited from the old State Board of Health. Long since outgrown that space, the several divisions were widely scattered. Two, laboratories and sanitary engineering, occupied attic space in the State House. Others were housed in legislative committee rooms between sessions of the Gen-

eral Assembly. Still others were in rented quarters. A branch laboratory at Carbondale was located in Holden hospital and one at Chicago in the basement of the administration building of the medical college of the University of Illinois, rent free. Some of this make-shift housing situation still prevails in 1962, although much improved for most of the divisions.

SUMMARY

When Dr. Hall became Director of Public Health on April 1, 1929, he found a well-organized Department with an alert and energetic staff accustomed to functioning effectively, within man-power range, on all fronts in the field of public health. He left in the same way, somewhat stronger numerically, at the end of his term on January 25, 1933. He made no effort and expressed no desire to change the organizational structure or replace personnel. His aim was to use the machinery as he found it, adding a bit of oil here and there, to the best possible advantage in solving the state's public health problems and this he achieved to a considerable degree.

The Department of Public Health was confronted with and its operation was colored and sharply influenced by numerous extraordinary developments of far-reaching significance on the public health during Dr. Hall's four years in office. These included the onset and three difficult years of the great economic depression; a withering drought which seriously impoverished the people in 40 southern Illinois counties; an epidemic wave of poliomyelitis; an outbreak of epidemic encephalitis; and an unusually high prevalence of smallpox and diphtheria during the first year. These difficulties notwithstanding, general health conditions in Illinois were considerably better at the end than at the beginning of Dr. Hall's incumbency, as measured by mortality rates and the prevalence of preventable diseases. In 1932, the prevalence of smallpox and diphtheria, the infant and maternal death rates and mortality from infantile diarrhea fell to all time low levels in Illinois, and improvement in these statistics continued for many years.

The sanitary engineering program of the Department was much stronger and more extensive at the end than at the beginning of Dr. Hall's tenure, owing to important new legislation and somewhat higher appropriations. Laboratory services also, including research, were improved and more extensive. A beginning was made in the development of a program of industrial hygiene.

The appropriation to the Department of Public Health in 1929-1931, the first under Dr. Hall, was \$1,319,722; and that for 1931-1933, the last, was \$1,433,442.

THE JIRKA-BAXTER ADMINISTRATION 1933 - 1940

No ceremony attends the changing of Directors of the Department of Public Health. There is no inauguration, no changing of the guard. The outgoing and the incoming Directors may not even see each other at this turning point in their careers. After a new man is elected Governor in November, a flutter of uneasiness and excitement, tinged with apprehension perhaps, runs through the Department's personnel and continues until the appointment of a Director is announced. All this was more understandable after the election in November 1932 than at any previous time in the history of the Department of Public Health. The state and nation were at the height of one of the most critical periods on record because of the great economic depression. Unemployment and poverty had reached alarming proportions and economic conditions were chaotic. Widespread and threatening unrest prevailed. Franklin D. Roosevelt had been elected President of the United States by an overwhelming vote on the promise of a New Deal. Henry Horner had been elected Governor of Illinois in a sweeping victory on a platform of economy. The Democratic party was in power in Washington for the first time since 1921 and in Illinois since 1917.

This was the situation on January 25, 1933, shortly after the inauguration of Governor Horner and shortly before the inauguration of President Roosevelt, when Dr. Frank J. Jirka of Chicago became Director of the Illinois Department of Public Health at the age of 47. A compassionate man, sensitive of human needs and frailties, he nevertheless took lightly the responsibilities of his new position. From the outset he spent about two days a week in the Director's chair at Springfield, commuting from Chicago. At the time of his appointment he was assistant professor of surgery on the medical faculty of the University of Illinois and maintained a substantial private practice. His previous experience, after graduation in medicine from Northwestern University in 1910, included five years of part-time duty with the Chicago City Health Department, teaching as an associate member of the medical faculty of the University of Illinois and five years as a medical officer in the United States Army during and immediately following World War I.

Personnel in the Department of Public Health soon discovered, after Dr. Jirka's appointment as Director, that any apprehension they

may have entertained about their jobs and duties was almost completely groundless, although thousands of people swarmed into the State House in an endless line seeking employment. Employee turnover in the Department of Public Health was negligible. Even the assistant director, Dr. Albert C. Baxter, was retained in that traditionally political position. No radical changes were made in administrative policy or program although Governor Horner's policy of economy affected the Department sharply in several ways.

First, an across-the-board reduction of 10 per cent in the salaries of state employees took effect in January 1933. Expenditures for travel, printing, purchases of equipment and the like were strictly limited at the same time. In March 1933 the division of social hygiene in the Department of Public Health was abolished as such and its employees, except for the chief and a few others, and its functions were consolidated with the division of communicable diseases. A little later in the same month, subsidy payments to the 26 local venereal disease clinics were stopped although the Department continued to supply them with therapeutic drugs and all but four continued in operation. On the other hand, the 12 district health superintendents, the medical field staff of the Department, were put on half-time duty, their salaries adjusted accordingly, and their number increased to 28 within a few months. This was done for two reasons—to spread employment and extend the coverage of the state with local Department representatives. These district health superintendents, for the most part, had neither special training nor experience in public health work and their activities were limited largely to complying with specific assignments from Springfield, mostly epidemiological investigations. The regular appropriation to the Department in 1933 was reduced to \$1,188,588, down by \$244,854 from that in 1931 but before the end of 1933 the number of employees in the Department had risen to 201 from 187 in January, the result largely of the half-time duty of district health superintendents. The half-time doctors were paid \$1800 per year, as were full-time nurses. The salary of full-time doctors on the staff ranged from \$2800 to \$3700, except the chief of the division of communicable disease at \$4500; engineers ranged from \$2180 to \$3100, except the chief at \$4500; bacteriologists from \$1600 to \$2400, except the chief at \$4000; stenographers from \$1200 to \$1350, except the Director's secretary at \$2100. Other salaries were in proportion. The day to day management of the Department was left largely to Dr. Baxter, the assistant director.

A major turning point in the entire course of development of the State Department of Public Health took place during the Jirka-Baxter administration. This resulted primarily from the enactment and implementation of two Federal laws. One was the Federal Emergency Relief Act, approved May 12, 1933. The other was the Social Security Act, approved August 14, 1935. The influence of the first on the Department was temporary; that of the second, along with subsequent

laws that stemmed therefrom, was permanent and profound. Jobless persons were hired by the Federal government under the provisions of the Relief Act and put to work on special projects under the supervision of the Department. Under the provisions of the Social Security Act, annual allotments of Federal money were made to the Department for public health activities devised by the Department.

Health-related projects financed by Federal relief money aimed primarily at creating jobs quickly and in which the Department participated, were officially launched in January 1934 when Dr. Jirka was appointed by the Federal government as State Director of Community Sanitation in Illinois, without salary. This gave authority to the State Department of Public Health to supervise the projects. It could thereby prescribe programs and get work done without assuming the responsibility of handling money and payrolls. Projects initiated at that time according to plans previously developed included: (1) sealing off dangerous pits of abandoned coal mines, (2) mosquito abatement largely through drainage, (3) replacement of insanitary privies in unsewered areas, and (4) the construction of public water supply and sewage disposal systems either as entirely new facilities or as improvements or expansion of existing facilities.

To accomplish these purposes an engineer from the U. S. Public Health Service was assigned to the Department to help organize and get the work going. He and several assistants were quartered in the office space of the division of sanitary engineering in the attic of the State House at Springfield. With the cooperation of local governments, an enormous volume of work was accomplished during the ensuing years. At the end of the first two years 21,870 privies had been constructed, about one-third on public grounds such as rural schools, and before the project ended in 1941, more than 50,000 units had been built. A great deal of permanent drainage of mosquito breeding areas in the southern part of the state, especially around Carbondale, Herrin, Mound City, Mounds, Ullin, Vienna and West Frankfort, was accomplished during the course of the mosquito abatement project which continued until 1942. Scores of sewage treatment plants were constructed, sewer systems extended and improvement of public water supply systems effected through the operation of that project which has continued in operation over the years on a somewhat different basis with respect to Federal aid. These projects served very well the double purpose in view—employment of the jobless in considerable numbers and raising the sanitation level in the state. The Federal government provided and handled the money for all of this work which the State Department of Public Health planned and supervised.

Another project started in 1934 was the employment by a Federal relief agency of about 100 public health nurses who were assigned to duty by the State Department of Public Health, mostly in southern Illinois. They rendered extremely valuable service in disease preven-

tion, especially diphtheria and smallpox, and in maternal and child health.

The Social Security Act was an entirely different matter. Under its provisions Federal money could be allotted to state public health agencies for the improvement and extension of state and local public health services. Expenditure of this money by the states was authorized only in accordance with general rules and regulations formulated and administered by the U. S. Public Health Service and the U. S. Children's Bureau which were responsible, respectively, for managing the funds appropriated by Congress under the provisions of titles VI and V of the Social Security Act. Each state was required, under the rules, to match the Federal funds dollar for dollar; to submit a plan and budget annually covering both state and Federal funds; to maintain an employee merit system in agencies using Federal funds; and maintain full time health officers in charge of Federally assisted units.

Title VI of the Social Security Act authorized Congress to appropriate annually to the U. S. Public Health Service \$8,000,000 "for the purpose of assisting states, counties, health districts, and other political subdivisions of the states in establishing and maintaining adequate public health services, including the training of personnel for state and local health work." Title V authorized the appropriation annually of \$3,800,000 to the Children's Bureau "for the purpose of enabling each state to extend and improve, as far as practicable under conditions in such state, services for promoting the health of mothers and children, especially in rural areas and in areas suffering from severe economic distress." The full amounts authorized were appropriated from the outset for several years and the amounts authorized were increased later but not always met by appropriations. The first appropriation covered the last five months of the fiscal year ending June 30, 1936, and became available to states on February 1, 1936. The formula used for allotting the money favored low-income states and the money was disbursed only through the official state agencies. Illinois was eligible for approximately \$500,000 per year from the first appropriations.

The need for this money in Illinois and elsewhere was almost desperate because of health problems created by rapidly changing sociological conditions, particularly as to urbanization and industrialization, and because of public demands which had been neglected by state legislatures. On the other hand, a good deal of sentiment in Illinois was opposed to state participation in this Federal program. Illinois and Massachusetts had both refused to accept annual allotments from the Children's Bureau for maternal and child health services which started in 1922 under what was known as the Sheppard-Towner Act. Dr. Jirka, however, with considerable misgivings, quietly negotiated favorably with the Public Health Service a budget of \$164,186 for the three months ended June 30, 1936, and of \$221,534.14 for the fiscal

year ending June 30, 1937; and with the Children's Bureau a budget of \$86,232.50 for the fiscal year ending June 30, 1937.

This action notwithstanding, he took up with the state Board of Public Health Advisors the matter of a policy on Federal relations at a special meeting on July 18, 1936, called for that purpose. The four members present were Doctors Clifford U. Collins, E. J. Doering, Samuel E. Munson and Maurice Rubel. Dr. Jirka's opening statement at this meeting, as recorded in the minutes, reads as follows:

MINUTES OF THE MEETING OF THE THE BOARD OF PUBLIC HEALTH ADVISORS

Chicago — July 18, 1936

ROLL CALL: *Present:* Board Members—

Dr. Clifford U. Collins, Chairman;
 Dr. E. J. Doering;
 Dr. Samuel E. Munson;
 Dr. Maurice Rubel.
 Dr. Frank J. Jirka, Director of Public Health.

ORDER OF BUSINESS:

Quorum present—Dr. Collins asked that a new chairman be elected to serve on the Board, he having served in that capacity for three and one-half years. No action taken.

DR. COLLINS: Meeting called to order.

DR. JIRKA: Meeting called for the purpose of considering the duties of the Department of Public Health under the Social Security Act.

DUTIES OF DEPARTMENT UNDER SOCIAL SECURITY ACT:

The use of funds available under this act; how much funds we could accept and what activities we should carry out with the funds made available to us, have been considered and reconsidered, in order that we might render the most service to the State and without socializing the practice of medicine.

We have been persistently urged by the Government to participate in these funds. The Government has accused us of holding out, or questioning the use of these funds. We have delayed and deliberated so that we might not get a set-up and then have to tear it down. We felt the people of the State would say "Why should we start activities and then have these activities stop?"

We have accepted some money from the U.S. Public Health Service. With this money we hope to set up in Illinois about 23 district health units. To date we have in operation only 6 full-time such units, and are employing physicians for this work who have been on the State Health Department staff and who are supposed to devote full-time to this work, but at the present are not doing so.

DR. DOERING: Are all these physicians engaged in the practice of medicine? Were they practicing at the time of their Federal appointments?

During the course of this meeting, Dr. Jirka offered justification for his action in response to questions. Dr. Rubel was outspoken against accepting Federal money, the other members were noncommittal and the session adjourned without any formal action having been

taken. Thereafter no formal question arose about the acceptance of Federal money under the provisions of the Social Security Act and Dr. Jirka went ahead with participation in the Federal program.

Even so, requests for "grant" money fell short of the amounts earmarked for the Illinois Department of Public Health and much of that budgeted was allowed to lapse. Of the \$164,186 budget for the first five month period, only \$9,329.46 was spent. Of the \$221,534.14 and \$86,232.50 of Public Health Service and Children's Bureau money, respectively, budgeted for the fiscal year beginning July 1, 1936, only \$17,283.60 and \$1,632.26, respectively, had been spent by the end of the first quarter on September 30, 1936. Money advanced to the state in accordance with this program was deposited with the State Treasurer and withdrawn on payrolls and vouchers submitted to him by the Director of Public Health. The State Department of Finance took no notice of these transactions. Indeed, the entire state government took a surprisingly casual attitude toward this Federal program of assistance to public health service. The opinion was general, even among the personnel concerned, that persons paid from "grant" money were somehow employees of the Federal government. In fact, once the money was deposited in the State Treasury, it was to all intents and purposes state money and subject to expenditure as such. Except for Federal qualification requirements, the Department exercised great freedom in the selection of employees to be financed with "grant" money.

The approved plans for using the Federal money, which were modified and changed from time to time, proposed merely an extension and intensification of established programs within the organizational framework of the State Department of Public Health, except for a new venture in training personnel. Features of the plan and budget approved by the Public Health Service for the year ending June 30, 1937 included the following:

1. Training personnel	\$ 39,465.00
2. Syphilis control	25,889.14
3. Occupational disease control	23,070.00
4. Establishment of 23 full time Public Health District units	133,360.00
	<hr/>
	\$ 221,784.14

Development under this budget, and modification thereof, by the end of the fiscal year on June 30, 1937, included:

1. The establishment of nine full-time public health districts, each consisting of a medical health officer, a nurse, an engineer and a clerk, and each serving from two to six counties. These units functioned under the supervision of the division of communicable diseases;

2. The creation of a division of industrial hygiene, effective July 1, 1936. The staff consisted of a medical chief, a medical assistant, two engineers, a chemist, two laboratory assistants and two clerks. It was quartered in Chicago;
3. The establishment of three new venereal disease clinics, revival of subsidy payments to 26 others and the adoption of the practice of providing free drugs for the treatment of all syphilitic patients;
4. The adoption and initial application of a policy of financing the formal training of employees and prospective employees for careers in public health service. Under this plan, 28 nurses completed one semester courses at the School of Public Health of the University of Michigan prior to June 30, 1937 and thus met the minimum requirements of the state law and Federal regulations for public health nurses. One doctor had spent a scholastic year and several others had taken six-week summer courses at the Michigan school of public health by June 30, 1937. This was the beginning of a continuing program which has provided academic training in public health subjects for several hundred people—doctors, nurses, engineers, bacteriologists, health educators—at the expense of the Department with Federal funds;
5. The addition of considerable strength to the laboratory staff as a result of a supplementary budget against Federal funds which became available on January 1, 1937.

CHILDREN'S BUREAU FUNDS

Features of the plan for using the \$86,232.50 in the budget approved by the Children's Bureau for the year ending June 30, 1937, included the following:

1. Staff additions to division of child hygiene and public health nursing	\$ 44,732.50
2. Nurses employed jointly by counties.....	26,000.00
3. Refresher training of pediatricians	10,500.00
4. Fees to M.D.s for vaccinations, etc.....	5,000.00
	<hr/>
	\$ 86,232.50

By the end of the budget year the accomplishments credited to these funds included the addition of two doctors, one nurse, one nutritionist and one lecturer to the staff of the division of child hygiene and public health nursing; the establishment of jointly financed nursing services in 12 counties; and a very substantial increase in the volume of work done, particularly as to preventive treatments against diphtheria, typhoid fever and smallpox.

For the second full year of Federal assistance, beginning July 1, 1937, budgets of \$337,428 and \$171,176 from the U. S. Public Health

Service and Children's Bureau, respectively, were approved. By the year's end, the number of full-time public health districts in operation had been raised from 9 to 12, serving 61 counties with an aggregate population of about 2,700,000; jointly financed county nursing services had been increased from 12 to 15; special academic training at the Michigan school of public health had been financed for 35 nurses and several doctors; considerable strength had been added to the Department's personnel; and a generalized nursing service, including bedside care, had been established in the eight counties—White, Gallatin, Saline, Pop, Hardin, Massac, Pulaski and Alexander—which had suffered severely from the flood of January 1937. Here began, with the use of two homemade incubators, the Department's program of specialized care of prematurely born babies, a project which grew in later years into a major activity.

Thus began, from a cautious, hesitant start, an administrative relationship with the Federal government in a program which has grown enormously, improved in efficiency and has been of immense benefit to the public health in Illinois. The Federal agencies concerned have exercised no supervision over nor interfered with the administration of state affairs, except as to the observance of state and Federal laws. On the other hand, they have been extremely helpful to the Department of Public Health in numerous ways by responding favorably to specific requests. These include special epidemiological studies, surveys, specialized short-term training courses and the loan of personnel.

OTHER ACTIVITIES AND PROBLEMS

From start to finish the seven years of the Jirka-Baxter regime were crowded as no previous administration had been with natural and man-made events of the highest importance. Some threatened serious and large-scale damage to health and life. Others offered new and promising ways of protecting and improving health. It seemed as though these phenomena were staged by superhuman forces to test out and measure the effectiveness of the machinery being built up in the Department of Public Health. They ranged from a major flood in southern Illinois in January 1937 to the outbreak of World War II in Europe in August 1939; and from the introduction of serum therapy for pneumonia to the enactment of several important health-protective laws. They included unusual epidemic outbreaks and important changes in the Department's personnel. The most spectacular of these events was the flood water over the lowlands along the Ohio River in Illinois during January and February 1937.

THE GREAT FLOOD OF 1937

Overflowing rivers and out-of-control spring freshets are no novelty in Illinois. This flood in dead winter was different. It inundated 978 square miles of Illinois land on which were scores of communities,

thousands of homes and the whole complex of modern life. Seven municipal water supply systems were completely submerged, two others continued to function only by use of emergency equipment and most of the 35,000 people whose homes were completely or seriously inundated were evacuated to quickly established refugee camps—tent colonies, C.C.C. camps, schoolhouses and churches. The magnitude and seriousness of the situation took Governor Horner, Dr. Jirka and other high-ranking state and Federal officials on a personal inspection tour of the area.

Alerted by heavy rainfall and rising water levels upstream in the Ohio River, the Illinois Department of Public Health anticipated trouble and, before the flood broke, assigned several engineers to duty in the threatened area to observe developments and take any necessary action for the protection of public water supplies. As the situation worsened, all available personnel of the Department who could be used—doctors, nurses, engineers and inspectors—were concentrated in the disaster area with headquarters established at Carbondale. During the peak of the emergency period—five or six weeks—hundreds of relief workers from other state agencies, other nearby states, municipalities including Chicago, the Federal government, various industries such as railroads, and the Red Cross were active.

Under the direct supervision of the Department, hundreds of drinking water supplies were maintained, safe sewage disposal facilities provided, suitable foods served and wholesale inoculations against typhoid fever and smallpox carried out. Rehabilitation services rendered by the Department included special attention to public and private drinking water supplies, sewage disposal, including the replacement of privies, the cleaning of homes and streets and the health of mothers and children. A full-time generalized nursing service was established for extended duty in the eight counties most seriously affected by the flood. The fact that no epidemic outbreak, attributable to dislocations caused by the flood occurred, and that health conditions during and following the emergency suffered no set-back, attests to the effectiveness of the emergency and subsequent work performed in the flooded region.

AMEBIASIS EPIDEMIC

Two epidemics during this period stand out prominently above all others because of their magnitude, rarity, dramatic features and influence on public health administration. One was an outbreak of amebic dysentery, or amebiasis, associated with the World's Fair in Chicago which started in July 1933. Ultimately involving 1704 identified cases (98 fatal) of which 1409 occurred outside of Illinois, this peculiar outbreak was not recognized as an epidemic, because of the wide dispersion of cases throughout the land, until November when it came tardily to public attention through newspaper headlines. Once

recognized that Chicago was the source of this epidemic, which radiated into 400 cities, local and state health authorities soon learned from epidemiological studies that 1050 of 1409 out-of-state victims had been guests of the Congress Hotel while in Chicago. Concentrated attention of health authorities to that hotel, which included the health histories and medical tests of employees, led finally to the discovery that faulty plumbing had caused the pollution of the hotel's drinking water supply. Through back-siphonage action, leaky valves and leaky pipes, effluent from the sewer system got into the drinking water supply system which was circulated throughout the hotel. To this polluted water supply the celebrated epidemic was attributed.

TYPHOID OUTBREAK AT MANTENO

The other outstanding episode was a devastating epidemic of typhoid fever in 1939 at the Manteno State Mental Hospital which accounted for 453 cases of illness and 60 deaths, of which 96 cases and 9 deaths were among construction workers and hospital employees, the remainder being mental patients. This outbreak, worst in the United States after 1925, began on July 8 and reached a peak toward the end of August. Personnel from the Department of Public Health made routine investigations and recommendations promptly after notification of the first case. Later, as the situation got completely out of hand in mid-August, a considerable staff of Health Department personnel, including doctors, nurses, engineers and bacteriologists, was assigned to duty at Manteno by the Director of Public Health for the duration of the emergency. This staff not only helped care for the sick but made an exhaustive study of the entire tragedy. Tests proved clearly the possibility that the institution's drinking water supply, drawn from local wells through state-owned facilities, could have been polluted by leakage from the sewer system. Based largely on this evidence, the epidemic was attributed to the pollution of the hospital's water supply. As an aftermath of the epidemic, the Director of the Department of Public Welfare, Mr. A. L. Bowen, was indicted on the charge of neglect of duty but was acquitted after the litigation was considered by the Supreme Court.

OTHER TRANSMISSIBLE DISEASE made prominent in the Department's annals during this period because of novelty, unusual prevalence or new techniques of control, include encephalitis, Rocky Mountain spotted fever, poliomyelitis, pneumonia and the venereal diseases, especially syphilis.

An epidemic outbreak of encephalitis in St. Louis involving 562 cases during August and September 1933 touched off state and national interest which resulted in a conference at St. Louis on August 26 of experts from health departments in Illinois, Missouri, local governments and the U. S. Public Health Service; and the initiation of a research project by the laboratories of the Illinois Department of Public

Health which included experimentation on monkeys purchased for that purpose and housed in a fourth floor corridor of the State House until expelled many months later as a nuisance by the Secretary of State. With no other suitable place to house the monkeys, this promising research project was abruptly terminated before yielding anything of definite value about encephalitis. However, field studies of recurring minor outbreaks in Illinois during subsequent years, especially in 1934, produced strong but not conclusive evidence that mosquitoes were the vectors.

Rocky Mountain spotted fever, first diagnosed in Illinois in 1934 when one case was reported, attracted particular attention of the Department of Public Health in 1937 when three cases were traced definitely to the bites of native ticks, the first evidence that ticks in Illinois were infected. The next year, specific or presumptive evidence pointed to native ticks as the vectors of the 21 cases reported. This experience prompted the Department to publicize widely the risks of infection from native ticks and the importance of precautionary measures. No serious recurrence of this disease has been experienced.

To combat poliomyelitis, the dreaded crippling disease which had become endemic in Illinois and subject to epidemic outbursts, Governor Horner, at the suggestion of Dr. Jirka, appointed in July 1935 a special advisory committee to outline a program of action aimed at coordinating and improving efforts at control throughout the state. This committee, headed by Dr. Jirka, including the following:

- Dr. S. O. Levinson, Michael Reese Hospital, Chicago
- Dr. Phil Lewin, Michael Reese Hospital, Chicago
- Dr. Paul H. Harmon, Department of Surgery, Billings Hospital, Chicago
- Dr. Geo. W. Staben, Orthopedic Surgeon, Springfield
- Dr. Winston H. Tucker, State Department of Public Health
- Dr. Howard J. Shaughnessy, State Department of Public Health
- Dr. Lloyd Arnold, Medical College, University of Illinois, Chicago
- Dr. Garm Norbury, Jacksonville
- Dr. Frank J. Jirka, Director, State Department of Public Health, Springfield, *Chairman*

Under the guidance and with the cooperation of this committee which was a dedicated, very active group, a manual for doctors and special popular literature about poliomyelitis were published by the Department and widely distributed to the profession and laity before the onset of an epidemic wave which brought 689 reported cases in 1936 and 779 in 1937. The use of seven state and 54 locally owned respirators, or iron lungs, maintained at the state hospitals and other strategic points was placed at the disposal of the Department and transported, when needed, by state facilities. Convalescent serum for

treatment of selected patients and medical and nursing consultation were made freely available by the Department under the guidance of the advisory committee in an extraordinarily comprehensive and vigorous attempt to stem the disease and minimize its consequences on patients. There is no evidence that the yield from these measures was of any particular benefit except perhaps psychological.

A type-specific serum therapy attack on pneumonia, most deadly of the transmissible diseases at that time, was an entirely new venture started in January 1939 by the Department of Public Health. Plans for this project started in November 1938 with the appointment of Dr. H. A. Lindberg to head up a specially trained staff in the Department and the organization of an Advisory Council on Pneumonia consisting of the following:

Dr. O. H. Robertson, Chicago, *Chairman*
Dr. M. Herbert Baker, Evanston
Dr. E. E. Irons, Chicago
Dr. Howard Dick Countryman, Rockford
Dr. Harry A. Durkin, Peoria
Dr. Ford H. Hicks, Chicago
Dr. Paul S. Rhoads, Chicago
Dr. Italo F. Volini, Chicago
Rev. John Barrett, Chicago

The next steps included the specialized training of 175 bacteriologists; the designation of 120 local laboratories as approved pneumonia typing stations; the establishment of 37 pneumonia serum centers at strategic points; and the acquisition of type-specific serum for all the more common types of the disease. Through this machinery, which continued to function until the mid-forties when serum therapy was largely replaced by more effective drugs and antibiotics and without preliminary typing, thousands of serum treated patients experienced a survival rate about four times higher than patients not so treated.

The menace of venereal disease came forcefully to public attention nationally in the mid-thirties due largely to a broadcast program initiated by the U. S. Public Health Service. The words "syphilis" and "gonorrhea" began for the first time to appear with increasing frequency in the daily press. Indeed, the assumed indecency of these two words at that time prompted the management of a radio network to cancel at the last moment a well-advertised address by Dr. Thomas Parran, Surgeon General of the U. S. Public Health Service, because he insisted on retaining the word "syphilis" in the script. Sharing this interest was Edward P. Saltiel, a Chicago attorney and Representative in the Illinois General Assembly. Shocked by what he saw of human wreckage attributed to venereal disease while on an inspection tour of the state mental hospitals, he introduced in the Legislature on his own initiative two bills the passage of which added substantial momentum to the program against venereal diseases in Illinois. One,

passed in 1937, required premarital medical examinations for venereal diseases, including laboratory tests for both gonorrhea and syphilis. The other, passed in 1939, required physicians to take blood tests for syphilis of pregnant women under their care. The enforcement of these two laws was a powerful educational factor which made an impact on a cross section of the entire population at crucial points in their lives. It resulted in a substantial increase in the strength and extent of the venereal disease program of the Department, especially laboratory service.

OTHER EVENTS

Striking improvement and expansion of the Department's laboratory services took place during this period. On July 1, 1933, a new all-purpose branch laboratory, located at Urbana, was opened, supplementing the main laboratory at Springfield and the branches at Carbondale and Chicago. At the same time the manufacture of biologics was started in quarters on the State Fairgrounds at Springfield, loaned by the Department of Agriculture, and the laboratories were licensed for that purpose later in the year by the U. S. Public Health Service. Among products prepared for distribution were silver nitrate solution, typhoid fever vaccine, diphtheria toxoid, rabies vaccine and several others. Also, on July 1, 1933, the laboratories began the practice of testing for potency and safety all biologics purchased by the Department for distribution. On July 15, 1935, a research unit in the laboratories was organized, headed by Dr. Thomas C. Grubb. Early in 1937, a fully equipped, trailer-type mobile diagnostic laboratory for field duty at the site of epidemic outbreaks, which proved to be temporarily valuable but was later abandoned, was purchased and placed in commission. In April 1938 a committee on standardization was appointed to draw up criteria for use in, and give guidance to, a campaign for the improvement of local privately operated diagnostic laboratories. The members of this committee were:

- Dr. A. A. Day, Professor of Bacteriology, Northwestern Medical College
- Dr. Lewis Hill, Pathologist, Chicago
- Dr. I. H. Neece, Counselor, State Medical Society, Decatur
- Dr. John L. White, Chief of Diagnostic Laboratories, Chicago Health Department
- Dr. Lloyd Arnold, Professor of Bacteriology, University of Illinois Medical College

Dr. Rueben Kahn of the University of Michigan, who developed the Kahn test for syphilis, was appointed as a special consultant to work with the committee, as occasion required, and Herbert E. McDaniels, Ph.D., was assigned the duty of inspecting and appraising the local laboratories which elected to participate in the project. Participation in this project was stimulated greatly by the legal provision, which be-

came effective in 1939, that laboratory tests required by the premarital and prenatal health examination laws would be valid only when done in laboratories approved by the State Department of Public Health. In 1939 an appropriation of \$125,000 was made to the Department for the purchase and remodeling of a building in Chicago for the main laboratories and to that location was moved the biologic manufacturing and research facilities. The above-mentioned developments, and the addition of technical personnel, brought the Department's laboratories to a top-level rating among the state public health laboratories in the nation with respect to the quality and character of services performed if not in size.

Three full-time tax supported local health departments were permanently established in 1937 as a result of popular elections on April 6, 1937, the culmination largely of promotional work done by the State Department of Public Health. One was at Champaign-Urbana, embracing two townships, and another at East St. Louis, embracing four townships. These two were set up under the provisions of a special law, known as the Coleman Act, applying only to townships and road districts. The other was at Peoria, set up by authority of a special law applying at that time only to the city of Peoria. Before the end of 1937, all three were organized and functioning, headed by Dr. G. Howard Gowen at Champaign-Urbana, Dr. R. C. Farrier, at East St. Louis, both selected through state civil service examinations, and Dr. Sumner Miller at Peoria.

In September 1935 the Department, through the division of sanitary engineering, started the practice of conducting formal hearings for milk pasteurization plant operators whose facilities failed to meet the sanitary standards prescribed by the Department. This practice, authorized by an amendment in 1935 to the milk pasteurization law which required dealers to obtain a state license, was an important step forward in the Department's supervision over the sanitary quality of pasteurized milk which was first authorized by law in 1925 and which has been second only to the sanitation of public water supplies as a preventive of various communicable diseases.

New education ventures by the Department during this period include:

1. The display of an elaborate exhibit, prepared jointly with the medical college of the University of Illinois, at the Chicago World's Fair in 1933;
2. The introduction in 1938 of a series of transcribed weekly radio broadcasts called "The March of Health," dramatic in character, which came to be used by practically all downstate stations and attracted favorable comment in the March 1939 issue of *Radio Guide*;
3. The initiation in February 1939 of an itinerant motion picture unit financed in part by the Illinois Tuberculosis Association;

4. The offering of free blood tests for syphilis at the State Fair in 1938 which demonstrated by popularity (3,908 volunteers representing 96 counties of the state and a wide range of age and social status took advantage of the offer) that the public was considerably ahead of officialdom in their attitude about venereal diseases.
5. The operation of a series of regional popular programs during 1938 and 1939, consisting of exhibits, lectures and movies over periods of three to six days which attracted from 5,000 to 20,000 visitors at each location.

In 1938 a field training unit for nurses, candidates for public health certification, was established in eight southern counties where 12 trainees per year participated in a generalized nursing service under excellent supervision. During the same year demonstration projects in maternal and infancy hygiene were carried out in three counties.

IBM tabulating equipment was acquired and a generalized statistical service organized in April 1938, the first of the kind installed by the state government.

By the end of 1939, the number of full-time, fully staffed district public health units, the organization of which started in 1936, had increased to 20, covering all counties. Participation in financing 13 downstate venereal disease clinics had been re-established, or initiated, and considerable strength had been added to the headquarters unit of the venereal disease control staff, including a full-time medical venereal disease control officer.

LEGISLATION IN THE 1933-1939 PERIOD

Numerous laws of public health significance were enacted as amendments or entirely new acts during this period. Some were initiated by the Department. Others were promoted and sponsored by interests outside the Department and quite independent of it. Among these legislative accomplishments which were approved by the Governor and became laws are the following:

The 1933 enactments provided for: (1) the obligatory use of silver nitrate solution or equally effective prophylaxis in the eyes of newborn babies; (2) the creation of a commission on handicapped children consisting of the State Director of Public Health, the State Director of Public Welfare and the State Superintendent of Public Instruction (ex officio) and four prominent citizens interested in crippled children; (3) the legalization of children born out of wedlock whose parents subsequently married.

In 1935, an amendment to the milk pasteurization law of 1925 was the only law enacted, the enforcement of which was vested in the Department of Public Health. It provided for the annual licensure of all milk pasteurization plants on the basis of appraisals made by the Department and prescribed penalties for non-compliance with the De-

partment's regulations. A bill proposing compulsory premarital medical examinations was introduced in the 1935 session of Representative Edward P. Saltiel but failed at that time.

Legislative enactments in 1937 affected the Department of Public Health only indirectly. The most important of these was the Saltiel amendment to the marriage laws which required premarital medical examinations, including laboratory tests, for venereal diseases. As the Department was obligated by the law to test free the specimens submitted to its laboratories, and as the Director of Public Health was made the arbiter (by an amendment in 1939) in certain cases where infection was found in a candidate for marriage, a considerable increase in the workload of the Department, especially of the laboratories, resulted from this law. Also in 1937, the law relating to public health nurses was revised and strengthened as to minimum qualifications.

Legislation enacted in 1939 increased the responsibilities of the Department of Public Health in several respects. One of these acts, initiated and sponsored by interests outside the Department, created in the Department a division of cancer control, established an advisory board thereto and required the Department, by a companion law, to perform certain diagnostic services in relation to cancer.

Another shifted to the Department of Public Health from the Department of Public Welfare, the licensing and supervision over maternity hospitals.

The Ohio River Valley Sanitation Compact, an agreement embracing Indiana, Kentucky, New York, Ohio, Pennsylvania, Tennessee and West Virginia, was ratified and the Director of Public Health made ex officio member of the commission.

A law which requires physicians to take from pregnant women under their care a blood specimen for laboratory testing for syphilis, and one which placed the supervision of Grade A milk supplies in the Department of Public Health were also enacted in 1939. A number of bills on health matters which failed during this period include two in 1937 and one in 1939 which proposed the establishment of state tuberculosis sanatoria.

The biennial appropriations of the State Legislature to the Department of Public Health for ordinary and contingent expenses during this period were as follows:

<i>Biennium</i>	<i>Appropriation</i>
1933 - 1935	\$1,188,588
1935 - 1937	1,280,628
1937 - 1939	1,792,674
1939 - 1941	2,313,921

Grants from the U. S. Public Health Service and from the U. S. Children's Bureau during this period were as follows:

Fiscal Year Ended

June 30	USPHS	TOTAL
1936	\$164,186.00	0
1937	221,534.14	86,232.50
1938	337,428.00	171,760.00
1939	624,010.87	137,745.17
1940	755,454.30	122,470.42

The Federal grants were so substantial that the Department soon found this source of income essential to the maintenance of services built up under the stimulation of those funds and was quick to promote pressure on Congress when serious talk of reducing state aid appropriations became current.

All of the accumulating legislation on health matters during this period and the substantial increases in appropriations to the Department, plus large grants from the Federal government, reflect the rapid growth of public interest in public health matters and an unparalleled advancement of confidence in the State Department of Public Health on the part of the people generally and of the state legislators and the Governor.

PERSONNEL CHANGES

Dr. Frank J. Jirka resigned as Director, effective October 23, 1937, although he had been reappointed earlier for a second four year term by Governor Henry Horner who praised his administration highly in an address at a farewell party arranged for Dr. Jirka by the Department.

Dr. Albert C. Baxter, assistant director, was appointed *Acting Director* on October 23, 1937 and continued so until May 3, 1939 when he was appointed Director and continued so until October 19, 1940 when he was succeeded by Dr. Roland R. Cross who had been appointed assistant director on January 16, 1940.

Mr. Clarence W. Klassen was made *acting* chief of the division of sanitary engineering on January 16, 1935 and *chief* later that year, succeeding Mr. Harry Ferguson who had been the able chief of the division from April 19, 1920 until his death on January 16, 1935.

Dr. Charles F. Deatherage was made chief of the division of dental health education on November 1, 1935 when that division was created, at the request of the Illinois State Dental Society, in place of a section on dental health in the division of child hygiene and public health nursing.

Dr. Milton H. Kronenberg was made chief of the division of industrial hygiene on July 1, 1936 when that division was created, with headquarters in Chicago, upon recommendations by the U. S. Public Health Service and after clearance from the Director of the State Department of Labor who had the legal responsibility of guarding the health of industrial workers.

Howard J. Shaughnessy, Ph.D., was on leave of absence from the position of chief of the division of laboratories from July 15, 1937 to August 1, 1938, during which time Herbert E. McDaniels served as acting chief. Upon Dr. Shaughnessy's return, the headquarters of the laboratories were moved to Chicago where the main laboratories have since remained.

Dr. R. H. Woodruff became *acting* chief of the division of vital statistics in 1935 and was succeeded by Richard Ledgerwood, Ph.D. in 1939 as a series of changes caused by the lingering illness and death on March 9, 1937 of Mr. Sheldon Howard who was chief of the division from July 1, 1917 until his death. Another change associated with this situation was the appointment of Lawrence Wilson in April 1938 to organize and head up a statistical section serviced by newly acquired IBM tabulating machinery.

Dr. H. A. Lindberg was appointed in November 1938 to organize and supervise a pneumonia control staff and at about the same time Dr. Herman Soloway was appointed to head up a considerably enlarged venereal disease section, later re-established as a division.

Dr. Raymond V. Brokaw became chief of the division of cancer control on April 1, 1940, selected by the Advisory Board on Cancer Control and appointed by the Governor quite independent of the Department. This action resulted from a special law of 1939 creating the division in the Department and designed to eliminate politics from its operation. Under the provisions of a companion law, Dr. Perry A. Melnick was appointed at about the same time as pathologist in the laboratories for expert cancer diagnostic service. Both of these laws were later repealed and the cancer control program integrated in the regular Department machinery, the advisory board being retained as a legal entity.

Many other changes in the professional and technical personnel, mostly additions, took place during this period of phenomenal growth of the Department. This rapid expansion was made possible and indeed almost inevitable by three factors: (1) grants from the Federal government; (2) a sharp upturn of public interest in health matters; and (3) the great economic depression. Job hunters were plentiful, some already well-qualified for positions in the Department and others needing only short-term special training to become qualified.

SUMMARY

The Jirka-Baxter administration, coextensive with the tenure of Governor Henry Horner, marks the beginning of an entirely new era in the history of the Illinois Department of Public Health. Up to 1933, it had been treated by the General Assembly almost as an intruder into the state government, to be tolerant rather than encouraged, and had been almost ignored, functionally, by most Governors. By 1940, carried along by the march of events, the Department was well

on the way to becoming a major factor in state affairs. Practically all of the established programs in 1933 had been substantially expanded and several new ventures initiated. The financial resources of the Department had been nearly tripled and its legal responsibilities greatly broadened by new legislation. Personnel qualification standards over and above those required by the State Civil Service Commission with respect to the professions had been adopted, as had a policy of providing qualified candidates with the necessary special training to meet these standards. At the beginning of this period there were 12 district health superintendents in the field, each working alone except for a part-time clerk. At the end, there were 20 full-time district public health units in the field, each with a physician, an engineer, at least one nurse and a clerk, all of whom met the new qualification standards. The total number of employees in the Department had increased by more than one-third. To encourage the establishment of local rural public health nursing services, the practice of paying one-half the expenses thereof for two years was started in 1936 and 28 counties had participated in the plan by the end of 1940. No substantive change was made in the organizational pattern of the Department, new divisions and new services being added on the same structural base. The growth of public health service in Illinois during this period was evolutionary but it related largely to the State Department of Public Health. Efforts to strengthen and establish full-time local health departments were limited to the offer of grants-in-aid from Federal funds. Cook County took advantage of this proposition and established on July 1, 1940, as a unit in its welfare department, a well-staffed health department headed by Dr. Edward A. Piszczeck, a graduate of the Harvard School of Public Health, to serve the suburban and rural parts of the county. This unit was financed very largely by grants from the state while substantial grants were made after 1936 to several other full-time local health departments.

Pervailing health conditions throughout the state improved noticeably in several respects during this period. In 1940, new all-time low records were established in infant and maternal mortality and in death rates from infantile diarrhea, diphtheria, pneumonia and typhoid fever. The prevalence of diphtheria (936 cases) and smallpox (167 cases) in 1940 was the lowest on record and continued downward thereafter. On the other hand, very little improvement marked the course of tuberculosis and none at all of the venereal diseases, while such ailments as cancer and heart diseases followed a strong upward trend.

Governor Henry Horner died on October 6, 1940 and was succeeded on that date by John H. Stelle, the Lieutenant Governor. About two weeks later, on October 19, Governor Stelle appointed Dr. Roland R. Cross to the post of the Director of Public Health.

THE CROSS REGIME 1940 - 1959

On October 19, 1940, Dr. Roland R. Cross of Dahlgren, Illinois, at the age of 53, became Director of Public Health under circumstances which seemed to foreshadow his retirement within three or four months but which turned out to be more than nineteen years away, a longer tenure by far than that of any previous state health officer of Illinois. He was appointed by Governor John Stelle, a Democrat, whose short tenure of 98 days and thoroughly political, would end on January 13, 1941. Dr. Cross had been Governor Stelle's personal physician and friend for some years and it was already apparent that the Republican candidate for Governor, Dwight H. Green, would win the November election, which he did. Thus the prospects of reappointment after the change of Governors on January 13, 1941, appeared to be very slim indeed.

This outlook filled Dr. Cross with no dismay. A mild-mannered and one of the most gentle and considerate of men, he had a passion for doing well any job or duty that was his obligation. His background of training and experience was excellent for the responsibilities he now assumed. This included a medical degree from the American Medical College of St. Louis; special postgraduate study at Washington University and the Mayo Clinic; several years in private practice; about five years of medical work in the Federal Indian Service; several years as a medical officer in the U. S. Army during World War I; a district health superintendent on the staff of the State Department of Public Health from April 1, 1933 to January 16, 1940, and after that assistant director of the Department. His appointment as Director was therefore in a fact a promotion from the ranks in the Department.

From the outset Dr. Cross successfully resisted sharp political pressure to make sweeping changes in the Department's personnel. On one occasion, when an emissary from the party patronage office handed him a list of nominees to replace most of the division chiefs of the Department, he sternly ordered the emissary to take back the list and bring no more. With that sort of thing settled, Dr. Cross set about making some changes of his own, operational in character. For this the time was ripe. Administrative improvements commensurate with the needs, especially with respect to accounting and internal communication, had failed to keep pace with the explosive growth in the Department's resources, personnel, and programs after the advent of Federal aid in 1936.

This Dr. Cross recognized and made one corrective move on December 9, 1940, when, by executive order, he created, or rather re-created, a division of venereal disease control and appointed Dr. Herman M. Soloway to head it. Then on December 14, 1940, barely two months after becoming Director, Dr. Cross made the first basic organizational change of a far-reaching plan to improve and modernize the administration of public health service in Illinois, state and local. On that date he abolished the position of "chief clerk," the heart of a cumbersome operation involving accounts, purchases and personnel transactions, a carry-over from the old State Board of Health days. Simultaneously he created the position of "senior administrative officer" with a rank second only to the Director and filled the new job with a seasoned, successful public health administrator, B. K. Richardson, who for twenty years had been chief of the division of health education. This change, which carried with it the separation of accounting and personnel matter, established a clear line of communication with the Director and set the stage for more organizational changes to come, attracted widespread and favorable attention from both within and outside the Department.

This action, along with a high-minded attitude generally which Dr. Cross expressed by word and deed toward his responsibilities during what he regarded as a very brief incumbency, impressed, among others, the medical profession and especially the officers of the Illinois State Medical Society who organized a committee to see the new Governor about the Department of Public Health. The outcome was the reappointment of Dr. Cross on October 1, 1941, without his having turned a hand in his own behalf, except by attention to his job. In announcing the appointment, Governor Green declared in a statement to the press that "I have considered direction of the Department of Public Health as such a vital function in government that almost from the day of my election last November, I have given constant consideration to the selection of the man under whose direction the Department should be. I have consulted with many medical and health authorities, and the recommendation of Dr. Cross has been almost unanimous." It may be added that throughout his eight years in office Governor Green demonstrated repeatedly and often a deep and active interest in the Department of Public Health and in public health affairs generally.

During the long wait for a decision on reappointment, his resignation on the Governor's desk for disposition at the Governor's pleasure, Dr. Cross was far from idle. The General Assembly was in session, the nation was drifting rapidly into war, the reorganization of the Department wanted attention and the regular work of the Department needed doing. On May 27, 1941, President Roosevelt declared a national emergency, followed quickly by a rapid, comprehensive program of preparation for war. The production of ammunition and all manner

of war material, already at a high rate of manufacture for use abroad on a lend-lease arrangement, was stepped-up and recruitment for the armed forces which had started at a lively rate some months earlier, was greatly increased. The impact of all this on the Department of Public Health was great, as it resulted in the concentration of troops and camp followers and the establishment of munitions depots at numerous points in Illinois. The requirement of blood tests of all military recruits and the restriction of enlistment in the armed forces and employment in sensitive industries to citizens, brought unprecedented demands on the Department for laboratory services and for official evidence of birth registration. The Federal government and industry began to compete in earnest for professional and technical personnel, such as those in public health service.

Stimulated rather than discouraged by these imponderable distractions, Dr. Cross went ahead stubbornly with his plans for modernizing public health administration in Illinois, state and local. The 1941 Legislature provided a slightly higher biennial appropriation, \$2,263,921 for the two years ending June 30, 1943 against \$2,188,921 (excluding \$125,000 for the purchase of a laboratory building in Chicago) for the preceding biennium, and amended several laws so as to clarify, simplify and strengthen the Department's responsibilities with respect to water and milk supplies, premarital health examinations and birth registration. This legislation actually added new responsibilities to those arising from national bellicose events but did little to help finance new or expanded activities. To compensate in part for the shortage in state appropriations, Dr. Cross took advantage of the facilities of the Works Progress Administration and National Youth Administration, two national agencies devoted to economic recovery, to get some of the work done. A WPA project in birth record indexing, started in December 1940, was greatly expanded in March 1941 so as to provide a night shift of workers assigned to meeting the overwhelming demand for records of birth, delayed registrations alone having jumped from 6,812 in 1939 to 166,025 in 1941. The NYA assigned eight young men as helpers, and the Public Health Service assigned two bacteriologists to the laboratories during 1941 to assist in doing blood tests of selective service registrants which exceeded 100,000 per year. The NYA also constructed for the Department 200 incubators for use in the care of preliminary born babies. These items illustrate the resourcefulness of Dr. Cross in getting a job done under difficult circumstances.

LONG TERM PLANS ADVANCED

On July 1, 1941, an experienced auditor, Robert T. Malone, from the Department of Revenue, was appointed to take charge of the accounting office as a separate operating unit attached to the general office. Among other things, this step introduced an important change in the Department's attitude toward and manner of expending money

obtained from the Federal government which previously had been casual. Thereafter this money was handled in all respects as though it were money appropriated to the Department from state revenue funds. Later, in 1949, this procedure was made a legal requirement when the Legislature, on recommendation of the Director of Finance, started the practice of appropriating to the Department any money anticipated as Federal grants.

On August 27, 1941, as a means of increasing functional efficiency, a division of public health nursing was created by executive order. Miss Maude B. Carson, who had been for several years the chief supervising nurse in the Department, was appointed chief of the new division.

Then came a big step forward in the long term plans. With the approval of Governor Green, Dr. Cross invited the American Public Health Association to make a comprehensive survey of the public health facilities in Illinois, state and local, and to recommend a plan for improvement. As a result, Dr. Carl E. Buck, field director of APHA, and Dr. Alan McLaughlin, retired Public Health Service officer, began the study and appraisal on October 1, 1941 and completed the job in June 1942. The thirteen major recommendations coming out of the study, listed in the order of importance, proposed:

- (1) THAT A STATE-WIDE PUBLIC HEALTH COMMITTEE BE ESTABLISHED.
This Committee should consist largely of lay people, although some professional representation is desirable.

The State-Wide Public Health Committee has no legal status and no constituted authority. Above everything else it should be politically nonpartisan. Once established, it should perpetuate itself by setting up its own constitution and by-laws and, obviously, should be quite independent of any governmental agency. The primary function of the Committee should be to disseminate accurate information for the purpose of developing a widespread intelligent lay understanding of existent public health problems, what is being done, and what can be done, to solve them. In its efforts to define public health problems and to suggest ways and means of meeting them, the Committee should, of course, consult the State Department of Public Health and the local health authorities. The Committee Officers, in turn, must be able to count upon the State Department of Public Health for secretarial service and for continued effective advice and counsel.

This continuous state-wide health education or health information program to be conducted by the State-Wide Public Health Committee should be designed to accomplish three broad objectives:

- a) To bring a widespread understanding of the need for and value of adequate local health services as the necessary

- basis for developing sentiment favorable to the passage of legislation permitting the establishment of full-time county or combination of county health departments;
- b) After, or perhaps coincident with, the passage of permissive legislation, to develop public interest in each county which will result in the desire for a local full-time health department equipped to render the health protection and health promotion services which the people need and have a right to expect;
 - c) As full-time county health departments are established, to develop through the local health department a sustained lay interest which will be of inestimable value to the health officer and his staff in interpreting health practices to the people and in devising ways and means of meeting local health problems.

In effect, this means that the immediate objective of the Committee would be to assist in effecting the recommendations of this study which need public backing. The success or failure of this study may well depend in large measure upon the manner in which this Committee is organized and functions. This is true for two reasons:

In the first place, a number of major recommendations of the study, designed to provide more adequate health protection services for the people of Illinois, can only be effected through substantial public support. The State-Wide Public Health Committee can be extraordinary effective in bringing this about.

Secondly, since public health effort is largely educational, the Public Health Committee with its county affiliates can and should be of the greatest possible value in helping people understand, appreciate, and finally practice established procedures for healthful living.

(2) THAT LEGISLATION BE ENACTED PERMITTING THE ESTABLISHMENT OF FULL-TIME COUNTY OR COMBINATION OF COUNTY HEALTH DEPARTMENTS.

If legislation to permit the establishment of full-time county or combination of county health departments is to be enacted successfully, it must be permissive rather than compulsory, short and clearly defined, and should not disrupt or seriously alter existent governmental machinery for public health service. Further, it must have sufficiently widespread and articulate lay backing so that legislators will know that their constituents want it passed. (See Appendix "B" for the provisions which should be included in such legislation.)

- (3)-a. THAT THE STATE-WIDE PUBLIC HEALTH COMMITTEE ENDEAVOR TO DEVELOP A SUFFICIENTLY WIDESPREAD POPULAR UNDERSTANDING OF THE VITAL IMPORTANCE OF STATE AND LOCAL HEALTH DEPARTMENTS—WHICH, AFTER ALL, ARE DEALING WITH HUMAN LIVES—SO THAT POLITICS COULD NOT INTERFERE WITH THE APPOINTMENT OR RETENTION OF PROPERLY QUALIFIED PUBLIC HEALTH PERSONNEL AND THE PLANS FOR DEVELOPING SERVICES WHICH MIGHT WELL MEAN LIFE OR DEATH.

As a part of and corollary to this effort, it is recommended:

- (3)-b. THAT THE STATE CIVIL SERVICE LAW BE REVISED TO PERMIT AND ENCOURAGE THE SELECTION OF PERSONS MOST LIKELY TO FILL CAPABLY THE PARTICULAR POSITIONS FOR WHICH PERSONNEL IS NEEDED. (See page 39)

- (4) THAT, AS AN IMPORTANT MEANS OF MAKING POSSIBLE MORE EFFECTIVE ADMINISTRATION, THE STATE OF ILLINOIS PROVIDE A PUBLIC HEALTH BUILDING TO HOUSE ITS PUBLIC HEALTH DEPARTMENT. (See Rec. 4, page 83, and Rec. 7, page 90.)

- (5) THAT THE STATE CONSTRUCT AND MAINTAIN ONE OR MORE STATE TUBERCULOSIS SANATORIA IN THOSE AREAS WHICH ARE NOT ADEQUATELY SERVED BY EXISTING HOSPITAL FACILITIES. OBVIOUSLY, SUCH STATE SANATORIA SHOULD BE ADMINISTERED THROUGH THE DEPARTMENT OF PUBLIC HEALTH. (See Rec. 2, page 108)

(The most pressing need, so far as State Sanatoria are concerned, is for a sanatorium of about 800 beds to serve the southern part of the state, or if found more feasible, for two sanatoria of about 400 beds each.)

- (6) THAT A COUNTY SANATORIUM OF ABOUT TWO THOUSAND BEDS BE CONSTRUCTED IN COOK COUNTY FOR PATIENTS OUTSIDE OF CHICAGO. (See Rec. 1, page 108)

(There is legislation which would make this possible.)

- (7) THAT WHEREVER THE TUBERCULOSIS SANATORIUM LAW (THE GLACKIN ACT) IS OPERATING IN A AREA HAVING A FULL-TIME QUALIFIED* HEALTH OFFICER, SAID HEALTH OFFICER SHALL BE ONE OF THE THREE MEMBERS OF THE SANATORIUM BOARD. (See Rec. 3, page 109)

(This provision should apply to both municipalities and counties.)

- (8) THAT THE STATE DEPARTMENT OF AGRICULTURE MAINTAIN ITS FUNCTIONS IN THE CONTROL AND SUPERVISION OF FOOD, FOOD PRODUCTS AND FOOD-HANDLING ESTABLISHMENTS FOR THE STATE AS A WHOLE, BUT THAT IN AREAS WITH FULL-TIME QUALIFIED*

* Qualified here means meeting the qualifications of training and experience as established by the State and Territorial Health Authorities and approved by the U.S. Public Health Service. The State Department of Public Health shall be the judge as to whether or not an individual meets these qualifications.

HEALTH OFFICERS, THESE FUNCTIONS BECOME THE RESPONSIBILITY OF THE LOCAL HEALTH DEPARTMENT. WHENEVER A FULL-TIME HEALTH DEPARTMENT ASSUMES RESPONSIBILITY FOR THESE FUNCTIONS, IT MUST ENFORCE THE RULES AND REGULATIONS OF THE STATE DEPARTMENT, HOWEVER, MAY MAKE RULES AND REGULATIONS OF ITS OWN, PROVIDED THEY ARE MORE STRINGENT BUT NOT LESS STRINGENT THAN THE RULES AND REGULATIONS OF THE STATE DEPARTMENT OF AGRICULTURE. (See Rec. 3, page 141)

- (9) THAT THE CLAUSE OR CLAUSES OF THE PREMARITAL EXAMINATION LAW REQUIRING MICROSCOPIC SMEAR EXAMINATIONS FOR GONO-COCCI BE RESCINDED. (See Rec. 6, page 99)
- (10) THAT THE SALARY SCALE FOR PROFESSIONAL PUBLIC HEALTH PERSONNEL BE REVIEWED AND REVISED UPWARD AND SPECIFICALLY THAT THE SALARY RANGE FOR THE DIRECTOR OF PUBLIC HEALTH BE FROM \$8,000.00 TO \$12,000.00 AND THAT THE MINIMUM SALARY FOR CHIEF OF A DIVISION BE \$4,800.00 AND THE MAXIMUM \$7,500.00.
(This should apply to all divisions including the Division of Cancer Control.) (See Recommendations 3 and 4, pages 114 and 115)
- (11) THAT THE STATE DEPARTMENT OF PUBLIC HEALTH BE GIVEN SPECIFIC AUTHORITY TO CONTROL THE INSTALLATION AND OPERATION OF ALL PUBLIC WATER SYSTEMS. (See Rec. 1, page 141)
- (12) THAT THE STATE DEPARTMENT OF PUBLIC HEALTH BE AUTHORIZED TO REQUIRE PROOF OF COMPETENCY FROM ALL OPERATORS OF PUBLIC WATER PURIFICATION PLANTS, FROM ALL OPERATORS OF SEWAGE TREATMENT WORKS AND FROM ALL OPERATORS OF PASTEURIZING PLANTS. (See Rec. 2, page 141)
- (13) THAT THE PRESENT LAW REGARDING DELAYED BIRTH REGISTRATION BE REVISED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE U.S. BUREAU OF THE CENSUS. (See Rec. 5, page 83)

These are some of the major recommendations which it is hoped the State-Wide Public Health Committee and other organizations, groups and individuals will study and assist actively in putting into effect.

While the study was underway during the latter part of 1941, two new district units were organized, making a total of 21; a detailed survey of all counties, except Cook, to appraise the public health needs of each was initiated by the state district health officers; four cancer diagnostic clinics were established in local hospitals at Champaign, Peoria, Rockford and Springfield; the venereal disease control program, under the impact of Federal interest, was greatly expanded, including supervision over 33 downstate subsidized clinics; arrangements with the WPA to start construction on a laboratory building for the Department in Carbondale were completed; and on November 10, 1941, at

the suggestion of Dr. Cross, Governor Green appointed a new State Board of Public Health Advisors consisting of Dr. Robert Berghoff, Chicago, Chairman, Dr. James H. Hutton, Chicago, Dr. Raymond W. McNealy, Chicago, Dr. Walter Stevenson, Quincy, and Dr. Gerry Brown Dudley, Charleston.

Then, on December 7, 1941, the nation was plunged into World War II. Overnight everything was oriented to the war effort. The professional and technical staff of the Department was quickly depleted and employee turnover soon reached unheard of proportions. One newly hired stenographer, for example, worked only one day. Six physicians who completed a year of academic training in June 1942 at Department expense went immediately into the armed forces, as did most of the twelve nurses in similar status. At the same time the Director, assistant director and eight division chiefs accepted extra responsibilities on the State Council of Defense.

In the midst of all this turmoil and excitement, Dr. Cross pressed forward toward the achievement of his long term plan. Basic in this plan was the establishment of county and multiple county health departments, to which Dr. Cross was committed in his own mind prior to the APHA survey, and the adjustment of the organization of the State Department of Public Health accordingly. An opportunity to move decisively in that direction came when the General Assembly convened in a special war-emergency session in January 1942. Dr. Cross succeeded in getting enacted at that session a law, authorizing the Department to establish and operate "defense zone" health departments in localities selected and delineated by the Department. This law, an amendment to the Civil Administrative Code, gave the Department power.

"19. To define the boundaries of defense zones within this State for public health purposes, to alter the same from time to time, to establish and maintain health departments in such defense zones and to prescribe their powers and duties; provided, that no city, village or incorporated town which has established and is maintaining a board of health or public health board or department to pursuant to the provisions of 'An Act concerning cities, villages, and incorporated towns, and to repeal certain Acts herein named,' approved August 15, 1941, or any portion of such municipality or any territory owned by, leased to, or subject to the jurisdiction of any such municipality, shall be included within any such defense zone except upon approval of the corporate authorities of such municipality, or of the mayor or president of the board of trustees thereof unless or until such approval is rescinded by action of the city council or board of trustees; provided, that in cities and villages under the commission form of government such approval must be concurred in by a majority of the council.

"§ 2. WHEREAS, the preservation of public health during the existence of a state of war is a matter of the utmost importance and adequate protection can be provided more efficiently under the guidance of State-wide control which permits application of uniform methods on a broad scale and existing laws are insufficient to afford the proper measure of health protection,

therefore an emergency exists and this Act shall take effect immediately upon its passage.

APPROVED January 26, 1942."

Quick advantage was taken of this law in a way that would demonstrate the importance and practicability of full-time adequate county health departments. On March 11, 1942, each of nineteen counties was declared a "defense zone" for public health purposes and two more were added on May 4 and May 13, respectively. On April 1, June 1 and June 22, respectively, a fully staffed county health department, with local official sanction and cooperation, was set up by the State Department of Public Health in Lee, Williamson and Lawrence counties, respectively, as "defense zone" health departments. Similar departments were later set up in the same way, reducing state district health departments and assigning personnel therefrom to the "defense zone" departments, in DuPage, Fulton, Morgan, McDonough and Will counties. These were all financed entirely and operated by the State Department of Public Health, as a wartime expediency, with active support and cooperation from local officials. Local public health machinery was enlarged and expanded through state financial aid and given authority by the Department to function as county health departments in the other designated "defense zones." By July 1, 1943, the number of state district health departments had been reduced from 21 to 15 in order to staff the "defense zone" health departments with personnel. Thus a war emergency situation was employed to demonstrate the value and popularize the operation of county health departments prior to the enactment of permissive legislation.

COUNTY HEALTH DEPARTMENT MOVEMENT

In the meantime, Dr. Buck, at a meeting of the Illinois Public Health Association in Chicago on April 20, 1942, gave a progress report on the APHA survey and announced the first two of the forthcoming major recommendations—(1) that a state-wide public health committee be organized and (2) permissive legislation concerning county health departments be enacted. Shortly thereafter Governor Green, again at the suggestion of Dr. Cross, appointed the Vice President Emeritus of the University of Chicago, Frederick C. Woodward, chairman, and the wife of an Urbana banker, Mrs. Guy A. Tawney, co-chairman of the Illinois State-wide Public Health Committee. On June 17, 1942, these two, along with about 35 specially invited delegates from various large civic organizations and representatives of the State Department of Public Health, met at the Country Club in Springfield, organized the Illinois State-wide Public Health Committee, adopted a constitution, set up as its first and primary goal the job of obtaining from the Legislature at the 1943 regular session the enactment of a county health department law, selected Mrs. Margaret Cowdin, librarian of the State Department of Public Health, as executive secretary and went to work enthusiastically. By the time the legisla-

tive session began in January 1943, the Committee had recruited over 4,000 members, gained the strong endorsement of many organizations, including the state medical and dental societies, the Congress of Parents and Teachers, Illinois League of Women Voters, the Illinois Public Health Association, the Illinois Public Welfare Association and the American Medical Association, had made direct contact with many legislators and had organized an energetic committee to lobby for the proposed legislation.

In this manner was brought about the enactment in 1943, without a dissenting vote in the Legislature, a bill, prepared by the Department and later known as the Searcy-Clabaugh law, which authorized counties by referendum (or by resolution of the county board if no special tax were to be levied) to establish and maintain through special tax assessments, county and multiple county health departments. The bill passed on June 3, 1943 and was approved by Governor Green on July 9, 1943.

Immediately thereafter, the State-wide Public Health Committee, supported to the hilt by the State Department of Public Health, launched a permanent campaign to implement the new law. From the outset, the Department financed the Committee, which had no paid personnel except the executive secretary, and which was regarded as an auxiliary arm of the Department. Widespread successes on one hand, and pockets of dominating bitter opposition on the other, marked the course of this campaign from the beginning down to this writing (1962). Opposition, which thwarted success in several instances, stemmed usually from interests concerned primarily with tax assessments, although in Rock Island County the local medical society spearheaded the opposition. During the earlier years, the opposition succeeded here and there by merely keeping the proposition off the ballot either by court action on technical legal grounds or by persuading the board of supervisors to ignore properly submitted petitions. Subsequent amendments to the law, which reposed in the county clerk the responsibility of appraising petitions and preparing ballots, eliminated that device. The efforts of the State-wide Public Health Committee began quickly to bear fruit in practical results.

In 1944, six counties took advantage of the law, Adams and DuPage by popular vote and Edwards, Lawrence, Morgan and Wabash, by resolution of the respective county boards. The next year, at a judicial election on June 14, 1945, McLean and Montgomery counties voted heavily in favor of the proposition, which at the same time lost in St. Clair county because of opposition in the rural districts. Also during 1945, six counties, Alexander, Cook, Lee, Peoria, Pulaski and Will, took advantage of the law, by resolution of the county boards, to convert the existing "defense zone" health departments into local units, anticipating later action at the polls to authorize a special tax levy. Then in 1946, at the general election on November 5, county

and multiple county health department propositions, including a special tax levy in each case, carried handsomely in seventeen counties, losing only in one, Rock Island. Thus by the end of 1946, three years after the enactment of the Searcy-Clabaugh law, full-time, tax supported local health departments had been authorized by referenda as follows:

one-county units; Adams, DuPage, Effingham, Fulton, Lee,
McLean, Montgomery, Morgan, Peoria,
Shelby, Will

two-county units; Alexander-Pulaski, DeWitt-Piatt, Lawrence-
Wabash

four-county unit; Hardin-Johnson-Massac-Pope.

In addition, Cook county had established under the law, by resolution of the board of county commissioners, a health department to serve the suburban and rural parts of that county which maintained no full-time departments.

To encourage the development of adequate local public health services, the State Department of Public Health adopted in 1945 a policy of subsidizing full-time local health departments which met specified standards with respect to program and personnel qualifications. The formula used for subsidy payments favored low-income areas, approximately about one-fourth of the local budgets in most cases, exclusive of Chicago, which because of prevailing circumstances, received no subsidy during the earlier years of the program. State aid actually started experimentally in 1943 when the salaries of some employees of local health departments were paid directly by the State Department of Public Health from a fund of \$60,080 appropriated by the Legislature for that specific purpose, and from Federal funds. For many reasons, such as retirement benefit complications and employee loyalties, this method of advancing aid payments was unsatisfactory. Accordingly, the subsidy plan was generalized in 1943, and firmly established as state policy, when the Legislature appropriated to the Department \$250,000 "For Grants to Local Governments." Under this authority, lump sum subsidy payments, which could be applied to any budgeted expenses, were made to qualifying local health departments. The appropriation of state money for this purpose jumped to \$1,060,000 in 1947 and to \$2,500,000 in 1949. Thereafter the biennial appropriations for this purpose, up to 1961, were, respectively \$1,675,000; \$1,600,000; \$1,600,000; \$1,650,000; \$1,650,000.

The stimulation of substantial state aid and energetic activity by the State-wide Public Health Committee over the years has resulted in the improvement and gradual expansion of full-time local health services until in 1962 there were 21 administrative units, embracing 3 counties, operating under the provisions of the Searcy-Clabaugh law, and six municipal and five district units operating under the provisions of other laws. These 32 administrative units provide first-class, full-time public health services to about 70 per cent of the state's population.

Although good, often excellent, services are provided by all of the full-time local health departments, they are plagued by the shortage of qualified personnel, as they have been from the beginning, and by the disposition of health officers to move around from job to job. Short tenure and turnover of health officers affects particularly the health departments of counties and districts outside the large municipalities, the salary schedules being an important factor. In 1962, the health officer position was vacant in 14 of the 32 administrative units of local health departments, responsibilities of the office being reposed in an engineer or a nurse or a health educator, as circumstances dictated, on a temporary basis which not infrequently stretches out into many months and sometimes years.

TUBERCULOSIS

Dr. Cross, like all of his predecessors, recognized tuberculosis as a devastating plague of the first magnitude, and as preventable. Previous state health officers had tried in one way or another, some earnestly, some valiantly, without success, to get the state to participate substantially in the organized fight against that disease, dating back to 1899, which up to 1942 had been carried on with measurable progress but with increasing difficulties by voluntary and local governmental agencies. Only token appropriations specifically for tuberculosis control were made to the State Department of Public Health prior to 1941 when Dr. Cross, supported aggressively by the Illinois Tuberculosis Association, managed to get \$16,600 earmarked for that purpose. This was the modest foundation of a program that rapidly assumed major dimensions and into which the state in 1961 was \$8,374,962, nearly one-half of the total biennial appropriation in that year to the State Department of Public Health. The program actually started on February 1, 1942, when Dr. E. K. Steinkopff was appointed chief of the division of tuberculosis control. For several reasons the time was ripe for this step forward. Services were inferior and inadequate in the 63 counties with tax-supported anti-tuberculosis programs and in the 17 public tuberculosis sanatoria; the explosive growth of industrial activity brought together masses of workers under circumstances that favored the spread of tuberculosis; men were being deferred from military duty in increasing numbers because of tuberculosis.

Dr. Steinkopff went to work on these three problems almost simultaneously. The State Director of Selective Service made him chairman of the Downstate Tuberculosis Section of Medical Advisory Board No. 39, to which were referred for disposition all draftees outside Cook county who were deferred from military duty because of positive or suspected tuberculosis. Sanatorium care was found for those who needed it.

To deal with the problem in industry, a portable 35mm. photo-fluorographic unit was purchased, and a second unit with operating crew

provided by the U. S. Public Health Service, were scheduled to make chest x-ray surveys of workers in manufacturing plants of high priority rating.

To improve the quality of local tax-supported anti-tuberculosis services a set of standards for tuberculosis sanatoria and for sanatorium board field programs was devised and used in appraising local projects. In this Dr. Steinkopff had the help and guidance of an advisory committee, appointed by Governor Green for that purpose, and consisting of Dr. Robinson Bosworth, chairman, Dr. W. J. Bryan, Dr. K. G. Bulley, Dr. D. F. Loewen, Dr. F. M. Meixner, Dr. H. C. Sweeney and Mr. W. P. Shahan, who were also the Committee on Standardization of the Illinois Tuberculosis Association, and five of whom were medical directors of local sanatoria.

This beginning established the pattern that state participation in the tuberculosis program was to follow as it grew rapidly into the largest specific operation of the Department of Public Health financed almost entirely with state money. (The state's biennial appropriation for tuberculosis in 1961 was \$8,374,962 and the Federal grant was \$377,945.72.) Appropriations made specifically for the division of tuberculosis control went up to \$44,960 in 1943, and then, successively at biennial intervals, to \$88,160; \$96,630; \$110,170, and activities commensurately. Only one change has occurred (up to 1962) in the immediate direction of this program since it was activated in 1942. Dr. Steinkopff resigned on March 31, 1944 and Dr. Clifton Hall was appointed on January 14, 1945 to succeed him.

The growth of state participation in the tuberculosis program resulted only partly from the direct influence of the State Department of Public Health. Widespread public interest in this disease was aroused by numerous factors and began to express itself through organized channels. Local governments found too burdensome the cost of operating tax-supported programs and began to ask for state aid. The public was deeply impressed by the rejection and discharge from military duty of thousands of Illinois persons because of tuberculosis. Wide publicity given to the reports of three important studies on tuberculosis in Illinois focused popular attention on the problem. One was the survey of public health facilities in Illinois by the American Public Health Association, completed in June 1942, and on the basis of which Dr. Buck recommended the construction of one or more state tuberculosis sanatoriums. Another was completed in 1944 by the Illinois Legislative Research Council which showed, among other things, that "Illinois is one of only seven states which have only local sanatoria. It is the only one of this group which fails to subsidize the local institutions." The third was a survey of the tuberculosis situation in Cook County by Dr. Arthur W. Newitt of the U. S. Public Health Service, made in 1946, at the request of Dr. Cross acting on the recommendations of the Chicago Medical Society, which resulted in a highly

publicized recommendation that 3,000 new sanatorium beds be constructed in Cook County plus a corresponding step-up in the over-all tuberculosis program in that community.

Influenced by such expressions of growing public concern and other considerations, the executive board of the State-wide Public Health Committee on August 30, 1944 adopted a resolution strongly advocating the construction of five state-owned and operated tuberculosis sanatoria. At about the same time the Illinois Post-War Planning Commission recommended, among many other things, (1) the construction of five state tuberculosis sanatoria and (2) the subsidizing of local tax-supported tuberculosis agencies. Added to all this, Governor Green, in his inaugural address on January 8, 1945, recommended the construction of five state tuberculosis sanatoria, one to be in Cook County, at an estimated cost of \$7,570,500, remarking that "The proposal has been officially endorsed by public health and tuberculosis organizations, and the American Legion."

Thus the stage was set for legislative action at the regular session in 1945 when two bills relating to the matter were introduced. One, House Bill 325, introduced on March 21 by ten influential Representatives, proposed a subsidy of \$1.50 per day for each hospitalized patient and carried an appropriation of \$4,000,000. It cleared the House on June 14 without a dissenting vote and seemed certain of passage in the Senate. That was not to be. The Governor, shocked at the prodigal appropriation proposals from all sides, thought that sanatoria were enough for tuberculosis at one session of the Legislature and turned firmly against the subsidy measure. By a well-worn legislative maneuver, nearly always effective during the crowded terminal days of a session, the bill perished in committee when the chairman neglected to call it for consideration.

The other, Senate Bill 417, a sort of omnibus bill involving many millions for construction projects recommended by the Post-War Planning Commission, included an item of \$7,500,000, pared to \$4,000,000 as the bill went along, for the construction of tuberculosis sanatoria. This turned out to be futile when the Attorney General ruled that the money could not be expended legally because no law authorizing the state to build tuberculosis sanatoria was in the statutes. Land for sanatoria sites at Mt. Vernon and Savanna was acquired, however, from the appropriation.

Again in 1947, a bill proposing \$6,000,000 for subsidizing local tuberculosis sanatorium boards, after passing the Senate 33 to 3, was allowed by design to die on third reading in the House, during the closing hectic days of the session, in much the same way and for the same reason as prevailed in 1945. At the 1947 session, however, a bill appropriating \$6,700,000 to the Department of Public Health for the construction of sanatoria, and another authorizing the state to build and operate sanatoria and prescribing basic regulations therefor, were

enacted and approved by the Governor. The ultimate outcome of this legislation, after numerous changes and modifications of plans, was the construction of a state tuberculosis sanitarium at Mt. Vernon and one in Chicago. A third bill enacted in 1947, known as the peg-levy bill, authorized Chicago to increase its municipal tuberculosis sanitarium tax levy so as to yield \$4,750,000 in 1947 and \$4,500,000 annually thereafter, instead of the previous \$3,000,000 limit.

The enactment in 1947 of a fourth bill, which created the *Institution for Tuberculosis Research* "for the production, distribution and application" of BCG vaccine, resulted from Governor Green's personal interest in this matter. After consulting with Dr. Cross, who favored postponement of the project until BCG vaccine emerged from the experimental stage, the Governor went ahead. Management of the Institution was vested jointly in the University of Illinois and the Chicago Municipal Tuberculosis Sanitarium through a board of five medical members. This Institution has since its creation produced BCG vaccine and conducted several field demonstrations of its use, mostly in Chicago. The money, \$340,000, for financing construction during the first biennium of this project, was appropriated, strangely enough, to the Department of Public Health.

In the meantime, public sentiment brought to a focus by the Newitt survey and report, resulted in the organization on January 20, 1947, of the Chicago-Cook County Committee for the Eradication of Tuberculosis, representing powerful professional and lay organizations, with Dr. James H. Hutton as chairman and Mrs. Laura Lunde as co-chairman. Later this group was joined by downstate interests and on September 15, 1948, its name was changed to the Illinois State-wide Committee for the Eradication of Tuberculosis. This substantially enlarged and strengthened committee, which under its first name had maintained effective lobbyists during the 1947 legislative session, now went to work on a grand scale with an eye on the 1949 session of the General Assembly. Among other things, it obtained, through personal interview, the good will, if not a commitment, of Adlai Stevenson for the tuberculosis control program before his elevation to the governorship. Thus with much favorable sentiment from all sides, and only negligible opposition, a bill appropriating \$5,000,000 for subsidy payments to local sanatoria boards, and one appropriating \$1,000,000 for rehabilitating local sanatoria were easily passed and signed with a good deal of fanfare by Governor Stevenson on July 12, 1949. The legally prescribed formula for subsidy payments required local agencies to levy a tuberculosis tax of not less than $\frac{1}{2}$ mill, or appropriate the equivalent thereof, and to bill the state for budgetary deficiencies incurred on that basis. The state was not committed to permanent, large-scale participation in the anti-tuberculosis program. It was exactly fifty years, a full half-century, since the General Assembly in 1899 first turned down a legislative proposal, put forward by Dr. James A.

Egan, Secretary of the State Board of Health, for the construction of a state tuberculosis sanatorium.

When the subsidy bill passed in 1949 the state was already deeply involved in tuberculosis work. In 1945 two bus-type mobile x-ray units for itinerant chest x-ray service were ordered and on January 10, 1946, the first one was accepted on the State House plaza with suitable formality by Governor Green who became the first volunteer for a chest x-ray. This was the start of a state-wide case finding program conducted by the Department of Public Health which embraced, as it grew, six fully equipped and staffed mobile x-ray units, constantly on tour, numerous x-ray units installed in local hospitals for routine chest x-rays of patients as admitted, and medical and nursing consultation service. By 1962 nearly 4,000,000 chest x-rays had been performed on volunteers for this service with excellent results. The state program was meshed into and supplemented local programs.

The operation of tuberculosis sanatoria was an entirely new and costly venture for the state. Accordingly the dedication on May 13, 1951, a fearfully hot day, of the Mt. Vernon State Tuberculosis Sanitarium, the first to be completed, was regarded as an event of more than ordinary significance. It was therefore celebrated with elaborate ceremonies participated in by many distinguished guests, headed by Governor Adlai Stevenson, and which attracted more than 12,000 visitors during the day. By new construction the capacity of this sanitarium was increased in 1957 from an original 100 to 150 beds. Almost from the outset it has operated at approximate capacity, including an extensive out-patient program, and has provided the southern part of Illinois with a much needed and fruitful service. Dr. Isadore Zaplosky was the first medical director. Upon his resignation on August 23, 1952, Dr. Morris Zelman, a staff member, served as acting director until relieved of that responsibility on June 1, 1953 by Dr. Norman J. Rose who functioned as acting director until the appointment on August 26, 1953 of Dr. Herman C. Rogers who has since that date been the medical director. Throughout his incumbency this sanatorium has measured up fully to all of the requirements of a first-class hospital prescribed by official and voluntary agencies concerned with such matters.

The Chicago State Tuberculosis Sanitarium was dedicated on October 11, 1953 and the first patient was admitted on November 9 of that year. Built to provide 500 beds, not more than 400 were ever installed and difficulty was encountered from the start to maintain a patient load higher than from one-third to one-half capacity. After state money was first appropriated for sanatoria, Cook County had built an excellent sanatorium of its own and had converted into a tuberculosis unit one of its welfare hospitals. The Chicago Municipal Tuberculosis Sanitarium has been reconditioned and reorganized so as to function much more effectively. Above all, drug therapy which

shortened the length of sanatorium care for patients and reduced their infectivity had come into use and the prevalence rate of tuberculosis dropped almost precipitously. Consequently the Chicago State Tuberculosis Sanitarium, of which Dr. Karl H. Pfuetze was the medical director from the outset until September 1962, came into operation too late to become an essential factor in handling the tuberculosis problem adequately in that part of the state. Indeed the state tuberculosis sanitarium law was amended in 1957 so as to authorize the conversion of these sanatoria for other use when their need for tuberculosis patients dropped below the break-even point of diminishing benefits. The surplus of sanatoria beds led to the closing of several public and privately operated sanatoria and the partial or complete conversion of others to nursing home units.

Motivated partly by this situation and partly by ambition for ultimate victory over tuberculosis, those interested for various reasons in the problem proposed laws which would make compulsory the hospitalization of tuberculous patients and require annual tests for tuberculosis of the general population. These proposals were resolved, to some extent, into two legislative bills which passed the General Assembly in 1955. One, which required teachers and other employees of public schools to have a chest x-ray annually, became law. The other, which imposed compulsory hospitalization on tuberculous patients, was vetoed by Governor Stratton.

While tuberculosis is far from eradicated in Illinois, and there has been no diminution in the vigor of the official and voluntary programs against it, this disease is now only a fading shadow of what it once was in Illinois. From it the death rate per 100,000 people in 1961 was 4.8 compared with 128.7 in 1918, the first year of reliable mortality statistics for Illinois. In 1961, moreover, no death was attributed to tuberculosis in any of 48 of the 102 counties and no new cases were reported during that year from any of 11 counties. The major problem now centers in the congested population of Cook County with stubborn pools of infection in a dozen downstate counties.

WAR EMERGENCY ACTIVITIES

The onset of the war in December 1941 brought about a sudden change in the economy. A labor surplus shifted almost overnight to a labor shortage. Competition for professional and technical personnel was particularly keen in both government and private enterprise. In the Department of Public Health this situation led to an enormous personnel turnover on the one hand and demands for new services on the other. By the end of 1942 the Department had lost 75 employees, mostly engineers, doctors and nurses, to the military and that number went up to 130 before the war ended. Many others left for better paying jobs elsewhere. At the same time, recruitment was stepped up to fill vacancies as well as new jobs created by emergency activities.

Thus during the calendar year of 1942, the first full year of the war, 1191 names appeared on the Department's payroll in salaried positions of which there were about 800 including the positions in "defense zone" local health departments. The employee turnover in that year was about 400, an average of somewhat more than one per day. While the strength of the Department was maintained fairly well, despite the turnover, the technical staff was depleted. Of the 130 who left on military leave during the war, 41 were engineers, 22 were nurses, 15 physicians, and 12 laboratory specialists. Very few of these were replaced during the war and many of them never returned.

The shifting around of personnel is well illustrated by the experience in the position of chief of the division of maternal and child hygiene. On March 1, 1942, Dr. Fred L. Adair was appointed to that position. He resigned on May 31, 1943, and was replaced on July 1, 1943, by Dr. Hugo Hullerman, who in turn resigned on June 30, 1944, and was replaced by Dr. Henrietta Herbolzheimer. Likewise division chief jobs changed hands during the war in sanitary engineering, communicable disease, venereal disease, health education, tuberculosis, local health administration, dental health and industrial hygiene. The general administrative personnel in Dr. Cross' office remained stable, however, with the addition of Dr. Allan McLaughlin on April 15, 1942, as medical administrative assistant.

Amid these distractions, and indeed to a considerable degree because of the effects of the war, the Department intensified efforts along conventional public health lines, concentrated work in the nineteen areas of special military importance and undertook a number of temporary, war emergency projects. These varied in character and magnitude. Several of them are described on the following pages.

EMERGENCY MATERNITY AND INFANT CARE—In 1942 the Department began to participate, as a wartime expediency, in two extensive medical care programs. Both qualified as outright state medicine and were reluctantly accepted by the State Board of Public Health Advisors and by the Council of the Illinois State Medical Society only after prolonged debate. One, the "Emergency Maternity and Infant care," EMIC for short, a nation-wide enterprise financed entirely by the U. S. Children's Bureau with funds appropriated for that purpose, applied to the childbearing wives and their babies of men in the lower ranks of the armed forces. The other applied to persons deferred or rejected by Selective Service boards, or discharged from the armed forces because of non-service connected physical defects.

Pregnant wives of service men in pay grades IV, V, VI and VII were eligible to participate in EMIC. To qualify for prenatal, obstetric including hospital, and postnatal medical care, at government expense, any such woman had only to fill in and sign one portion of an application form furnished by the Department, then get a physician of her choosing to fill in and sign another portion and return it to the De-

partment. The physician was then authorized to proceed and was paid by the Department, after the work was done, in accordance with a specific fee schedule fixed by the Children's Bureau, which at the start was a maximum of \$35 for medical and \$50 for hospital care in uncomplicated cases. The same procedure was followed in authorizing pediatric care during one year for the babies concerned with a maximum fee of \$20.

Dr. Cross, fully aware of medical thinking about state medicine, undertook this program with considerable misgivings. His fears and those of others proved to be groundless. The favorable response of the medical profession, for whatever reasons, was overwhelming. Every county in the state was well represented by participating doctors and women. Indeed the work load built up so quickly that the Department was severely taxed to handle the administrative details.

The project got underway modestly enough. It started in Illinois on November 28, 1942. Only one case was authorized in that month and 48 in December. As word got around, the number soared upwards so that by June 30, 1943 an accumulated total of 2253, of which only 34 were pediatric, had been processed. The peak load came in 1945. From date of inception until the end of the project on May 20, 1949, service to 61,168 maternity patients and 12,580 pediatric patients was paid for by the Department. The over-all cost was \$7,034,652.53, of which \$428,920.00 or 6.1 per cent went for administration. The average cost of medical and hospital care per case was \$95.49 for maternity and \$60.82 for pediatric. To the everlasting credit of all concerned, administered as it was under exceedingly difficult circumstances complicated by high employee turnover and inexperience, this hastily implemented program ran its full course with negligible impropriety and with immeasurable benefits to those it served.

REHABILITATION OF SERVICE REJECTEES — Deeply concerned by the shockingly high number of young people rejected for military duty (about 25 per cent) because of physical defects, Governor Green decided early in January 1942 to establish through state governmental facilities a medical care program aimed at correcting the disqualifying defects wherever possible. He asked Dr. Cross to provide him with a plan for that purpose, after consulting with others concerned. To that end Dr. Cross called a meeting in his office in Springfield on January 12, 1942. Those attending were:

Dr. Roland R. Cross, Director of Public Health

Dr. Conrad Sommer, Deputy Director of Public Welfare

Dr. D. J. David, Dean, Medical College, University of Illinois

Major H. Worthington, Superintendent, Research Hospital, University of Illinois

Major E. M. Hartlett, Chief State Medical Officer of Selective Service

Mr. Robert A. Rennick, Department of Public Safety

Mr. Harry S. Canfield, Superintendent, State Division of Reports

Mr. Eugene DeGoveia, State Division of Reports

Dr. Herman M. Soloway, Chief, V.D. Division, Department of Public Health
Dr. C. F. Deatherage, Chief, Dental Division, Department of Public Health

The outcome of this meeting was a proposal, submitted to the Governor, that the state mental and research hospitals and the state subsidized venereal disease clinics be authorized to accept suitable cases for corrective treatment of such conditions as hernia, hemorrhoids, dental defects and venereal disease infections and that all agencies of the state government be called on to participate as fully as practicable. This plan was approved unenthusiastically by the State Board of Public Health Advisors at a meeting in Springfield on January 15, 1942, and was accepted, in principle, by the Governor after meeting with those concerned, including members of the Board of Public Health Advisors, in Chicago on Sunday morning, January 18, 1942. With a critical eye on the encroachment of state medicine, indigency was emphasized from the start by representatives of the medical profession as a qualifying factor for beneficiaries of the service but that term, in practice, came to be liberally interpreted.

A considerable number of rejectees, often urged on by public sentiment and official prodding, took advantage of this service. Rodney Brandon, Director of Public Welfare, reported in June 1942 that from six to eight cases were being handled daily in the state hospitals. For the Department of Public Health, the management of venereal disease patients discovered through Selective Service tests was simply a continuation, with perhaps some intensification and extension, of a program already well developed and financed with Federal money. Working closely with the Selective Service, the Department of Public Health, during the period October 16, 1940 to June 1, 1944, brought to treatment 8,402 infected downstate rejectees, of whom 2,982 had been, after treatment, inducted into military service and 5,420 were still under treatment on June 1, 1944. These fragmentary data, and opinions expressed by officials concerned, led to the belief that this venture into rehabilitation of the health of rejectees was a distinct success at practically no extra cost, as it had been meshed into other governmental operational procedures.

But the matter did not end there. This sort of thing, plus help in finding jobs etc., was extended in 1943 to include needy discharged veterans who for one reason or another did not qualify for adequate Federal aid. An inter-departmental committee, appointed by the Governor early in 1943 administered this program during the first two years through the division of rehabilitation in the Department of Registration and Education, with contributions of one kind or another from various other departments. The contribution of the Department of Public Health was to review applications for and authorize medical and hospital care in eligible cases, and approve payment therefor in accordance with a fee schedule promulgated jointly with the Illinois

State Medical Society. Dr. Cross, on September 11, 1943, appointed a medical coordinator, Dr. Herman Cole of Springfield, to perform this function on a part-time basis and he continued to do so until December 31, 1945. After that date, the Illinois Veterans' Commission, created by law in 1945, took over the entire job of aiding veterans.

OTHER WAR EMERGENCY ACTIVITIES—Because of the depletion of the sanitary engineering staff and the possibility of enemy action in Illinois, the Department organized in 1942 an "emergency water corps." It consisted of a group of volunteers, headed by a competent waterworks employee, in each of 10 districts, whose duty was to protect local water supplies in the event of disasters or sabotage. Engineers from the Department instructed these men and made available to them mobile emergency equipment which could be moved quickly to any place where need arose.

Nurses from the Department organized and taught volunteer classes in first aid, home nursing, nutrition and emergency sanitation, and assisted the Red Cross in that type of work.

Inasmuch as all blood plasma produced by the Red Cross was reserved for military use only, the Department placed in operation in 1942 a blood collecting unit which functioned for several months. Blood so obtained was processed into 4000 units of plasma and kept on hand for the duration of the war as a safeguard against emergency needs in the civilian population. One such emergency arose, an explosion at the Elmwood Munitions Plant in Will County on June 4, 1942, which created a need for 100 units of plasma that was promptly provided. The remainder was later distributed to meet routine demands after the end of the war.

A training school for bacteriologists and serologists was established by the Department and 6 of the 7 who completed the course in the spring of 1944 were employed at once to fill the gap left by those on military duty. Similarly a considerable number of nurses was recruited, given field experience in public health and financed at academic training centers. At the same time a program of financing special training for health educators was introduced. Such were some of the extraordinary activities of the Department during the war years.

CANCER CONTROL PROGRAM

The foundation of a state-financed cancer control program in Illinois was laid in 1939 as an outgrowth of public concern rather than because of anything done by the Department of Public Health. Indeed the Department had no voice in the promulgation and enactment of a legislative oddity which created a division of cancer control as a sort of appendage to the Department. The purpose, apparently, was to isolate the division from political influence, a motive which had no merit because political influence was negligible in the Department at the time and had been for years.

At any rate, the legislation not only created a division of cancer control in the Department but established an advisory board thereto of seven members appointed by the Governor from nominees submitted by recognized medical organizations of the state. The chief of the division, in turn, was made a state officer, appointive by the Governor, subject to the approval of the Advisory Board. The authority to engage in cancer control work was, however, vested by this same legislation in the Department of Public Health. This dispersion of authority left the division on an island of divided loyalties. There was little danger of its running wild, however, as the appropriation for the first two years added up only to \$11,600, of which \$8000 was for the salary of the chief and \$3600 for a secretary. The \$8000 was appropriated to the Department of Finance, as are funds for all state officers, so that the division chief was not on the Department's payroll. The \$3600 was appropriated to the Department of Public Health. The first bill embracing these features, passed by the Legislature, was found to be legally faulty and was apologetically vetoed by Governor Green. This action took place soon enough, however, to permit the passage of a second corrected bill before the session ended and this one became law.

At the same time, 1939, quite apart from the division of cancer control, a special appropriation of \$25,400 was made to the Department of Public Health, without consultation or request from the Department, for setting up a cancer diagnostic service. Out of this sum, \$8000 (\$4000) per year) was specified as salary for a full time pathologist, \$3000 for a technician, \$2400 for two clerks and the remainder for equipment and operational needs.

The members of the Advisory Board appointed by the Governor in conformity with the law were as follows:

David J. Davis, M.D., dean, University of Illinois College of Medicine,
Chicago, Chairman
William Cooley, M.D., gynecologist, Peoria
Faunteroy Flinn, M.D., radiologist, Decatur
Roswell T. Pettit, M.D., radiologist, Ottawa
James S. Templeton, M.D., councilor of the Illinois State Medical
Society, Pinckneyville
John A. Wolfer, M.D., Associate Professor of Surgery, Northwestern
Medical School, Chicago
Edwin F. Hirsch, M.D., director of Henry Baird Favill Laboratory,
Chicago, Secretary.

This Board nominated Dr. Raymond V. Brokaw who was appointed chief of the division effective April 1, 1940 and open an office in Chicago on that date with a secretary as his staff. During the ensuing year Dr. Brokaw busied himself with studying the problem, making contacts and evolving plans—what else could he do?

The cancer diagnostic service imposed on the Department by the Legislature got started on January 1, 1940 with the appointment of

Dr. Perry Melnick, a pathologist, who was attached to the division of laboratories in Chicago. Under his supervision, biopsy specimens taken from indigent patients were accepted for examination without cost. This service continued until Dr. Melnick left on June 12, 1942 for military duty and never returned, nor was he replaced. In September 1942 the tissue diagnostic service was transferred from the Department's laboratories to the tumor diagnostic centers referred to in the next paragraph.

In the meantime, the division of cancer control developed a scheme for establishing subsidized tumor diagnostic clinics in general hospitals. To these clinics any doctor could bring, without cost, any patient on specified days for expert diagnostic examination. The clinic sessions were open to all doctors for educational experience. The subsidy was payable as salary to non-medical personnel in the hospital to a maximum total of about \$3600 annually. In 1941 the Legislature appropriated \$40,000 for financing this scheme. On October 1, 1941, the first such clinic was established at Memorial Hospital in Springfield. Shortly thereafter similar clinics were established at the Methodist Hospital in Peoria, St. Anthony's Hospital in Rockford and Burnham City Hospital in Champaign. On March 16, 1943, as a wartime expediency, Dr. Brokaw was assigned to duty as acting director of the Champaign-Urbana Public Health District and thereafter for several months gave only part time to the cancer control program. Consequently, expansion stopped. The diagnostic center at Methodist Hospital was discontinued and one was established at the Illinois Research Hospital in Chicago prior to March 1, 1946 when Dr. G. Howard Gowen succeeded Dr. Brokaw as chief of the division. At this time there were four clinics in operation.

In the meantime, 1945, on recommendation of the Department of Public Health, the laws were so amended as to integrate the division of cancer control and its personnel into the Department on a status the same as other operating units. The legally constituted board of advisors was retained with appropriately modified responsibility. Continued public interest in the cancer problem was reflected in the large number of bills introduced in the legislature from time to time, offering proposals that ranged from the construction of a state cancer hospital to financing medical care for poor patients, and the increased appropriations to the Department for cancer control work. This amounted to \$90,764 in 1949. A bill enacted in 1943 permitted counties to levy a special tax, subject to referendum, for cancer control work. No county has taken advantage of it.

Rapid expansion of the tumor diagnostic facilities started in 1946 so that by June 30, 1954, a total of 27 clinics were operating in as many hospitals scattered broadly through the state. Generously subsidized on a performance basis (the method of financing was changed in 1946), equipment in addition to cash payments being provided in

some cases, these clinics held 9412 sessions, admitted 33,333 patients and reported the detection of 11,313 malignancies for the period March 1, 1946 to June 30, 1954. Beginning in 1947, when \$129,197 was allotted to the Department by the U. S. Public Health Service for cancer control work for the year ending June 30, 1948, Federal aid has been available for this program, ranging up to \$189,039 in 1950 and somewhat less thereafter. After 1949, because of a reorganization of the Department of Public Health, the division of cancer control was transformed into a bureau in the division of hospitals and chronic illness, and state money for cancer control work was no longer specifically identified for that purpose in appropriation bills.

The subsidized clinic project reached a peak in 1955 with 29 clinics in operation which varied widely in effectiveness, patient load and subsidy payments extended. With the resignation of Dr. Gowen on May 13, 1957, as chief of the division of hospitals and chronic illness, and the appointment on June 1, 1957 of Dr. Ruth Church to succeed him, came a change in policy with respect to diagnostic clinics. Lack of state personnel to maintain adequate supervision of the clinics on the one hand, which led to deterioration of services and some abuses in many places, and the growth and strengthening of local health departments on the other, a policy of subsidizing cancer diagnostic clinics only through full-time local health departments was adopted. This policy resulted by June 30, 1959, in the closing of all the subsidized clinics except one at Herrin which was retained because of the special needs in that locality and the establishment there of a full-time health department.

During this period the emphasis in cancer control work was shifted to and concentrated on periodic cytologic examination of the cervix for early detection of cancer in women. These examinations are performed for the most part by private physicians who are remunerated, in the case of indigent at \$10 per patient, and the program is operated by local health departments. The only direct payments made by the State Department of Public Health are for tests done on persons in state hospitals. In 1959 the General Assembly, influenced no doubt by the wide publicity about Arthur Godfrey's contemporary experience with cancer, appropriated \$200,000 to the Department of Public Health for promoting local cancer control programs. Thereafter no state money was identified specifically for cancer in appropriation bills. State money from non-specific funds appropriated to the division of hospitals and chronic illness is used, however, for the cancer control program. For the fiscal year ending June 30, 1963, the amount of state money budgeted for this purpose was \$159,200 to match an equal sum allotted to the Department by the U. S. Public Health Service for cancer control.

Presumably this program has contributed to a tapering off of the death rate from cancer which had risen rapidly and steadily in Illinois

from 1918, the first year of reliable data, to 1945. Since 1945 the death rate has increased only fractionally, reaching a peak of 171.7 per 100,000 in 1956 and standing at 168.2 for 1961. As a killer, cancer ranks second only to heart disease. Thus great emphasis is placed on research, liberally financed by governmental and voluntary agencies alike, seeking knowledge that will bring cancer to heel.

PREMATURE BABY PROJECT

The first timid efforts of the Department to provide special care for prematurely born babies took place in 1937. In that year several improvised incubators were constructed under the supervision of Dr. Ruth Raattama, a staff pediatrician, and turned over to some of the Department's nurses on duty in eight southern Illinois counties where a post-flood generalized nursing service had been established as a health protective rehabilitation project. These simple devices, which were let out on loan where needed, demonstrated their value when a pair of twins successfully weathered the hazards of prematurity after spending about three months in two of these crude incubators under the watchful eye of their mother aided by a practical nurse.

Encouraged by such experiences, more and better incubators were acquired as time went on, built by WPA and NYA, until 200 were on hand for lending by the end of 1940. Their use was accelerated through numerous county-wide maternity care projects which the Department organized, supervised and partly financed during the developmental period.

Helpful though it was, this limited service scarcely reached the heart of the premature baby problem. Too many difficult cases, where the babies needed expert medical and nursing care over long periods, were lost. This led to a more ambitious and comprehensive plan, devised in 1941 by Dr. Fred Adair, who was chief of the Division of Maternal and Child Hygiene at the time. Basic in this plan was the establishment in selected hospitals of permanent premature baby care centers, expertly staffed and adequately equipped to provide the necessary specialized services. The poor-risk premature babies would be brought to these centers while mobile services would be extended to others as needed. The Department would finance the project, including equipment for the centers, transportation of babies, medical and hospital expenses for the needy, and the special training of nurses.

After much discussion with the Board of Public Health Advisors and officers of the Illinois State Medical Society, Dr. Cross adopted this plan in 1942. The U. S. Children's Bureau approved the use of Federal money for financing the project on a demonstration basis. The first center was opened with facilities for 12 babies in St. John's Hospital at Springfield on January 1, 1943. Shortly thereafter the second facility was opened in St. Francis Hospital at Peoria. A third center was opened in the Christian Welfare Hospital at East St. Louis in

February 1947, where a three-week intensive training course for graduate nurses was introduced in 1948. The service proved to be immensely popular and attracted widespread attention. Although the rules eventually excluded from admission all babies weighing more than 4½ pounds and older than 7 days, admissions to the centers increased from 279 during the year ended June 30, 1944, to 891 during the year ended June 30, 1953. Nearly all counties of the state were represented by admissions during that ten year period.

Now a new difficulty arose. The Children's Bureau withdrew approval of using Federal money for the project on the grounds that the demonstration period was over. Up to that time only Federal money had been used. Governor Green approved the expenditure of \$50,000 from the Department's contingency fund to carry on the operation until June 30, 1955, but refused approval of a budget item to cover the project during the ensuing biennium. This seemed to be the end. All concerned were notified early in 1955 that state aid for operating the premature baby care program would terminate June 30, 1955.

That action started a storm of protest. Families all over the state had benefited by the program. It was strongly supported by the medical profession. Local welfare and health agencies were outspoken in its favor. Hospitals wanted it to continue. Members of the General Assembly soon got the word. The outcome was a specific appropriation of \$780,000 for the 1955-1957 biennium, passed over-whelmingly by the Legislature against the determined opposition of the Governor and his legislative leaders. The temporizing was over. The program was now solidly permanent as a state function. Appropriations for the three ensuing biennia were, respectively, \$700,000, \$650,000 and \$650,000.

Availability of state money as a permanent commitment justified an expansion of the program. Centers were opened at Chicago in Grant and Michael Reese hospitals on July 1, 1956, and later (1959) in Mt. Sinai Hospital, to serve Cook County. Training courses for graduate nurses have been introduced in all of the centers except the one at Grant Hospital in Chicago. As this is written the six centers are providing care for well over 1500 babies per year, 1631 during the fiscal year ended June 30, 1961, and 1514 during the year ended June 30, 1962. Of these 3145 admissions during the two years, 1788 were from downstate and 1357 from Cook County.

The survival rate of these poor-risk infants who are cared for in the centers is surprisingly high, about 75 per cent. In view of the degree of prematurity and the diminutive size of many of them, this seems remarkable. One tiny bundle of humanity, for example, who survived and grew into a healthy child, weighed only one pound six ounces when admitted to the St. John's Hospital center. The operation of the program has contributed also to the prevention of blindness from retrolental fibroplasia, the chief cause of blindness in infants at that

time. On October 26, 1951, Dr. Thaddeus Szewczyk, pediatrician at the Christian Welfare Hospital center in East St. Louis, announced the observation that an excessively high concentration of oxygen seemed to be always associated with the onset of retrorenal fibroplasia. This observation was one of several that led ultimately to the control of oxygen concentration in premature baby incubators and a resultant reduction in blindness from retrorenal fibroplasia.

Except for the operation of an ambulance service out of Springfield, the Department has financed this program indirectly from the start. To the extent of the state's liabilities, hospitals and physicians are reimbursed for services rendered. Operating the Springfield ambulance service resulted from an accident. In 1946 a baby was painfully burned while enroute in an ambulance from Vandalia to the St. John's Hospital center in Springfield when faulty electrical connections caused a fire in the incubator. Although the child was restored to health and all medical and hospital bills were paid by the state, the parents sued the ambulance company for damages. Thereafter, all ambulance agencies in Springfield refused to bid on this state contract work, even though the courts allowed no damages in the case. Since then the Department has operated the transportation out of Springfield, maintaining a custom built, specially equipped ambulance for that purpose.

The costs of the program paid by the Department and the number of babies cared for in the centers during each of the first 10 years are set forth in the accompanying table.

COST OF PREMATURE PROGRAM PER FISCAL YEAR 1943 - 1953

FISCAL YEAR	AMOUNT	No. INFANTS CARED FOR
July 1, 1943 — June 30, 1944	\$ 5,397.50	279
July 1, 1944 — June 30, 1945	14,769.46	379
July 1, 1945 — June 30, 1946	41,081.37	404
July 1, 1946 — June 30, 1947	66,216.06	588
July 1, 1947 — June 30, 1948	120,880.08	671
July 1, 1948 — June 30, 1949	183,053.07	818
July 1, 1949 — June 30, 1950	228,616.19	775
July 1, 1950 — June 30, 1951	197,437.87	902
July 1, 1951 — June 30, 1952	217,005.80	870
July 1, 1952 — June 30, 1953	242,953.48	891

HOSPITAL LICENSING AND CONSTRUCTION

Hospitals first came within the purview of the Department of Public Health in 1939 when the responsibility of licensing and regulating maternity hospital facilities and maternity homes was transferred by legislation from the Department of Public Welfare to the Department of Public Health. This shift of responsibility was the outgrowth of an evolving program of maternal hygiene which had gained for the De-

partment of Public Health much popular and professional favor through the energetic activities of two committees—the popular-oriented Advisory Committee to the Division of Maternal and Child Hygiene and the Maternal Welfare Committee of the Illinois State Medical Society. Credit for the legislative action was well earned by members of these two committees whose aim was to concentrate in the Department of Public Health full legal authority for a comprehensive maternal hygiene program. This was all the more important because of the rapid trend at that time of using hospitals for obstetric services.

Administration of this new responsibility began on January 1, 1940, when a set of standards for appraising maternity hospital facilities, divided into general medical and sanitary, was adopted. Inspections of downstate facilities were made by the Division of Maternal and Child Hygiene, the Division of Sanitary Engineering and the State Fire Marshal while those in Chicago were delegated to the Chicago Board of Health. Practically none of the 240 downstate maternity hospital facilities inspected during the first year measured up fully to the standard requirements. Consequently only provisional licenses were issued to 236 and licenses were withheld entirely from four. By the end of the second fiscal year on June 30, 1942, the number of down-state maternity hospital facilities had been reduced, because of either non-compliance with licensure requirements or the depletion of staff on account of military duty, to 190. Unconditional licenses had been issued to 142, licenses had been refused for five and the others were pending final action for various reasons. On June 10, 1942, the Attorney General, in reply to an inquiry from the Department about handling cases of non-compliance with regulations, recommended that:

"In cases in which maternity hospitals are being operated without a license or in violation of Paragraph 341-345, Chapter 23, Illinois Revised Statutes 1941, you should submit the evidence and facts concerning such operation to the State's Attorney of the county in which the violation is occurring and request that he prosecute the offenders."

The Department never resorted to court action, however. Difficult problems were solved by the extension of services and by educational and persuasive means. Indeed, from the very outset, the services offered by the Department went far beyond the mere process of inspection and licensing because of the overshadowing importance attached to this program. Among these services, eagerly accepted, were the following:

1. Consultant service on new construction and remodeling.
2. Consultation on obstetric and pediatric problems.
3. Consultation on nursing problems.
4. Nursing institutes for hospital nurses.
5. Statistical summary of obstetric work in hospitals.
6. Manual of maternity nursing procedures.

7. Obstetric and newborn record forms.
8. Metal incubators for care of premature infants on loan basis.
9. Signs to aid in control of visitors.
10. Forms for physical examination of personnel.

Although temporizing and improvisation were wartime necessities, two nurses kept a sharp eye and a tight rein on the maternity hospitals throughout the war period so that the division chief could report on June 30, 1944, that in spite of shortcomings "the hospitals attained a remarkable record as evidenced by indices of infant and maternal mortality." At that time 161 downstate facilities were licensed, 13 unlicensed pending improvement and four had been closed during the year. Higher operational standards and stricter observance of the rules marked the course of the maternity hospital program after the war.

The adoption and practical application of higher and stricter standards was made easier and indeed eagerly accepted by the hospitals as a result of a series of unfortunate events. Epidemic diarrhea of the newborn broke out in three maternity hospital facilities during the 1943-1944 fiscal year. Cleared up without much damage, these relatively minor flare-ups were only the forerunners of what happened during 1945-1946 when epidemics broke out in 11 hospitals involving 202 babies of whom 11 died. Maternity and nursery facilities in St. Francis Hospital at Peoria, in St. Joseph's at Alton and in several smaller hospitals had to be closed until thoroughly disinfected. This was indeed serious. The outcome was a conference in Springfield on August 27, 1946, called by Dr. Cross to consider the problem of diarrhea in nurseries. Eminent pediatricians and bacteriologists, representing the state and Federal public health services and several medical colleges were on the program. Representatives of most of the downstate maternity hospitals were on hand. Sterilization and patient isolation techniques much more rigid and strict than anything theretofore contemplated were recommended at the meeting and subsequently adopted as a feature of the appraisal standards. Application of the revised requirements through Department activity brought the maternity hospital facilities in the state to a high level of operating efficiency and safety. Throughout the years of development to this point, the Department extended its influence primarily through educational and persuasive methods and maintained excellent relations with hospitals, the professions concerned and the public. All were united in a desire for better medical and hospital services, particularly for mothers and babies, and supported the Department's efforts toward that end.

In the meantime, a movement destined to tower giant-like over anything previously undertaken with respect to hospitals was in the making. U. S. Senate Bill 191, introduced January 10, 1945, which became the Hospital Survey and Construction (Hill-Burton) Act when passed on August 13, 1946, was pending in Congress. This Bill, and the law after enactment, prescribed in considerable detail what states

would have to do in order to share in Federal grants for building hospitals. To qualify for grants, which would pay one-third of hospital construction and equipment costs, any state was required to (1) make a complete survey of hospital facilities within the state, (2) develop a comprehensive hospital construction plan favoring communities of greatest need both as to hospitals and money, (3) appoint a state Advisory Council on Hospitals to help with the survey and plan, and (4) submit the plan and survey report to the U. S. Public Health Service for approval. Many detailed requirements such as needs, fire-resistant construction, design appropriate to purpose, regional location of hospitals, non-discrimination, financial solvency and state supervision over construction and operation were included in the law as enacted, and regulations based thereon.

Prior to introducing Senate Bill 191, Congress had made a comprehensive study of the hospital situation in the nation, held numerous hearings and published a voluminous report thereon. Nearly all of the testimony, including that of the American Medical Association and the American Hospital Association, favored a Federal plan of assisting states in constructing desperately needed hospitals, especially in sparsely settled areas.

From knowledge of these proceedings, Dr. Cross was convinced long before its enactment that Senate Bill 191 would become law. Furthermore, the Illinois Hospital Association, on January 27, 1945, adopted a resolution favoring a survey of hospital facilities in the state as a step toward the orderly planning of new construction. Dr. Cross endorsed the resolution as a highly desirable and useful proposal regardless of any Federal action. Thus on April 23, 1945, he asked Governor Green to authorize the Department of Public Health to undertake the survey. The Governor's response was immediate and favorable. It read as follows:

**OFFICE OF THE GOVERNOR
SPRINGFIELD**

DWIGHT H. GREEN

Governor

Dr. Roland R. Cross

Director

Department of Public Health
Springfield, Illinois

April 23, 1945

Dear Doctor Cross:

In response to your letter under date of April 23, and in recognition of the public importance of the project, you are hereby authorized to proceed with the development and execution of plans for making a comprehensive survey of the hospital facilities and hospital needs of Illinois.

Very truly yours
 /s/ DWIGHT H. GREEN
Governor

The full available strength of the Department was thrown into the project under the immediate supervision of Dr. Henrietta Herbolsheimer who was chief of the Division of Maternal and Child Hygiene at the time. Administrative arrangements, including the appointment by Governor Green on July 23, 1945, of an Advisory Hospital Council and various survey forms, were patterned carefully after the specifications in the pending Federal legislation. Field work on the survey was started in September 1945 and the report and plan was completed on July 22, 1947. One of the first in the nation to be completed, the survey report and plan was approved by Surgeon General Thomas Parran of the U. S. Public Health Service on August 8, 1947.

On that same day, August 8, 1947, as circumstances dictated, Governor Green signed the Illinois Hospital Construction Act which had been passed several weeks earlier by the Legislature and which was quite similar in substance to the Federal law of like title. Administration of this law, which authorized the state to pay, in addition to Federal grants, as much as one-third of the construction costs of any approved hospital or public health center project, was placed in the Department of Public Health and \$80,000 appropriated for that purpose. At the same time, \$4,675,000 was appropriated to the Department of Finance (approved July 21, 1947) for grants, on approval by the Department of Public Health, to hospital construction projects during the ensuing biennium. Thus state and Federal monies and regulations permitted grants totaling up to two-thirds of the construction costs of any approved project. An amendment to the Civil Administrative Code at the same session of the Legislature, created a permanent Advisory Hospital Council of 15 appointive members with overlapping terms, and three ex officio members, the Director of the Department of Public Health, ex officio chairman, the Director of the Department of Public Welfare and the Director of the Illinois Public Aid Commission, 18 in all.

Members of the original temporary Advisory Council, of whom there were 51, made an enormous contribution to the success of the survey and the development of the plan. Committees and individual members of that body faithfully attended a multitude of meetings, the first on August 20, 1945, and made a number of field inspection trips during the nearly two years of highly complicated proceedings. That the job was well done is evidenced by the aforementioned legislation as well as approval of the report and plan by Federal authorities. The subsequent development of an outstandingly successful construction program, based on the original survey and plan, is likewise valid testimony of the excellence of the initial work.

Names of persons who served on the temporary committee and the subsequent Advisory Hospital Council are listed in another chapter of this narrative.

This Council was and is far from being a paper agency. Although meeting but once a year, it has approved the construction plans, revised annually, only after critical consideration, item by item, from copies submitted to the members well in advance of meetings. It has listened to dissatisfied applicants for grants, recommended appropriate disposition of complaints in these rather rare cases and has guided the Department expertly in the solution of many complicated problems which are an inevitable part of programs such as this.

Approval of the Illinois Hospital Construction Plan on August 8, 1947, by the U. S. Public Health Service, brought with it eligibility for a Federal grant of \$2,768,690 for allotment to construction projects during the period ended June 30, 1948. A Federal grant of \$2,764,357 was available to Illinois for the same purpose for the year ended June 30, 1949. These two allotments, plus the state appropriation of \$4,675,000, placed \$10,208,047 at the disposal of the Department of Public Health for making grants to hospital construction projects during the biennium ended June 30, 1949.

How to allot these and all subsequently available funds was spelled out in detail in the plan. In it was a priority schedule of every community in the state, showing exactly the number of hospital beds needed, as determined by formula, and the estimated cost. "A" priority list was as follows: (see page 76)

These communities were notified promptly of their priority status, provided with all necessary information and informed that funds were available to pay for two-thirds of construction costs of suitable projects, in priority order, upon receipt and approval of applications.

A Division of Hospital Construction and Services, with a technical staff of 10 and a clerical staff of 15, headed by Mr. George Hendrix, an engineer, was created on September 5, 1947 to administer the new program as well as that of maternity hospital licensing. By June 30, 1948, the Division had approved applications for and allotted grants totaling \$6,642,015.67 to nine projects in the order listed below:

Good Samaritan Hospital.....	Mt. Vernon	117	beds
Anna City Hospital.....	Anna	54	"
Mt. Vernon State Tuberculosis Sanitarium.....	Mt. Vernon	100	"
Fairfield Memorial Hospital.....	Fairfield	82	"
Lawrence County Hospital.....	Lawrenceville	46	"
Clay County Hospital.....	Flora	50	"
Mercer County Hospital.....	Aledo	55	"
Carthage Memorial Hospital.....	Carthage	46	"
St. Clemen's Hospital.....	Red Bud	61	"

First to start construction was Clay County Hospital when suitable ground breaking ceremonies, with Dr. Cross and Dr. Joseph W. Mountin of the U. S. Public Health Service participating, were observed at Flora on June 11, 1948. Construction at Red Bud, an addition to an existing facility, was the first to be completed and opened

ILLINOIS STATE HOSPITAL PLANT
 (General Hospitals)
AREA PRIORITIES WITH ESTIMATED COST OF CONSTRUCTION

Priority	Area	Principal City or Town	Total Acceptable Beds*	Total Needed Beds	Per Cent Need Met	Additional Beds Which May Be Constructed (State Plan)	Estimated Total Cost	
							At \$10,000 Per Bed	At \$15,000 Per Bed
A	1	R-17 Anna.....	0	56	0	56	\$ 560,000	\$ 870,000
	2	R-16 Metropolis.....	0	54	0	54	540,000	810,000
	3	R-10 Flora.....	0	50	0	50	500,000	750,000
	4	I-45 Robinson.....	0	100	0	100	1,000,000	1,500,000
	5	I-51 Mt. Vernon (Gen. Hosp.).....	0	161	0	161	1,610,000	2,415,000
	6	I-48 State TB Hospital.....	0	200	0	200	2,000,000	3,000,000
	7	I-9 Fairfield.....	0	160	0	160	1,600,000	1,600,000
	8	I-27 Lawrenceville.....	0	96	0	96	960,000	750,000
	9	I-55 Carthage.....	0	102	0	102	1,020,000	1,530,000
	10	I-8 Cairo.....	0	119	0	119	1,190,000	1,785,000
	11	I-4 Carlinville.....	0	50	0	50	500,000	750,000
	12	I-4 Chester.....	0	50	0	50	500,000	750,000
	13	I-30 Sparta.....	0	169	0	169	1,690,000	1,635,000
	14	I-3 Aledo.....	0	50	0	50	500,000	750,000
	15	I-12 Mount Carmel.....	0	50	0	50	500,000	750,000
	16	I-13 Carmi.....	0	50	0	50	500,000	750,000
	17	I-43 Vandalia.....	0	160	0	160	1,600,000	2,250,000
	18	I-46 Olney.....	0	100	0	100	1,000,000	1,500,000
	19	I-36 Jacksonville.....	0	165	0	165	1,650,000	2,475,000
	20	I-32 Lincoln.....	0	100	0	100	1,000,000	1,500,000
	21	I-3 Bayard.....	0	100	0	0	0	0
	22	I-7 Carrollton.....	0	50	38	31	310,000	465,000
	23	I-52 Herrin-Marion-West Frankfort.....	20	400	5	380	3,800,000	5,700,000
		I-53 Harrisburg-Eldorado.....	36	220	16	168	1,850,000	2,775,000
		Total.....	74	2,636		2,634	\$26,640,000	\$38,460,000

*Beds in buildings which are not fire resistive, or are over fifty (50) years of age or are in structures not built as hospitals are deleted.

**Rating within the B priority group is at the end of the group because these are urban areas in contrast to the rural areas.

This table is a composite of several Federal forms which are available in the offices of the State Department of Public Health.

on October 1, 1949. The Mercer County Hospital at Aledo, dedicated on January 22, 1950, and opened to patients on February 1, was the first entirely new project completed with the aid of state and Federal grants. Before the end of 1950, six of the first nine projects authorized were completed, open and operating.

A second and third appropriation of state money, \$3,000,000 in 1949 and \$1,414,400 in 1951, were made for grants-in-aid to hospital construction projects. Thereafter no more state money was appropriated for that purpose. Grants from the Federal government have varied above \$2,000,000 per year, reaching \$6,696,734 for the year ended June 30, 1962 and rising to \$7,035,732 for the year ending June 30, 1963. Eligibility for Federal aid initially applied to general hospitals, psychiatric hospitals and units, professional nurse training schools and dormitories, public health centers and public health laboratories. In 1954 the program was broadened to include nursing homes, chronic disease hospitals, rehabilitation centers and diagnostic or treatment (out-patient) centers. After the exhaustion of state money, not more than one-third of construction costs was granted to any project. It was less in many cases when it seemed wise to spread the available money among many eligible and worthy projects.

The Division of Hospital Construction and Services was made a Bureau in the Division of Hospitals and Chronic Illness when it was created in 1950 as part of a general reorganization of the Department. Mr. Hendrix was succeeded as chief of the Bureau by Mr. Jerome V. Ray, an architect, on December 1, 1953 and he, in turn, was succeeded on July 12, 1960 by Mr. George A. Lindsley, a hospital administrator. All three had been members of the staff from the beginning—or near the beginning, of the program.

From the outset the Department was required by Federal rules and by state law to exercise supervision over the operation of grant-in-aid hospitals. A provision in the Illinois Hospital Construction Act reads "The Director (of Public Health) shall by regulation prescribe minimum standards for the maintenance and operation of hospitals which receive aid for construction under the state plan." Except for maternity facilities, however, the Department had no supervisory responsibility over other hospitals. On the other hand, the admission of patients eligible for care at Federal expense was restricted to hospitals under state supervision. Because of its magnitude, this factor and other considerations created a demand for a general hospital licensing law. The Illinois Hospital Association initiated the campaign and strongly supported the legislation which resulted in the enactment of such a law in 1953. This law requires all hospitals, except those operated or licensed otherwise by the state and Federal governments, to obtain annually renewable licenses from the Department or Public Health. It likewise requires any person or agency proposing the construction of a hospital or additions to or alterations of existing hos-

pitals to obtain approval of plans from the Department before proceeding. As a check on the Department, the law created the Hospital Licensing Board of seven members, appointive by the Governor, whose approval is necessary before any rule prepared by the Department becomes valid. "No rule, regulation, or standard shall be adopted by the Department concerning the operation of hospitals licensed under this Act," says the law "which has not had the prior approval of the Hospital Licensing Board." By law the membership of this Board, with overlapping terms, must include two members of hospital governing boards, three hospital administrators actively engaged in the supervision of hospitals, and two practicing physicians licensed in Illinois to practice medicine in all of its branches. From the outset this Board, appointed early in 1954, has discharged its responsibility with extraordinary devotion, diligence and distinction. The first members of the Hospital Licensing Board were:

George K. Hendrix, *Chairman*, Hospital Administrator, Springfield
 Rev. John W. Barrett, Hospital Administrator, Chicago
 George H. Van Dusen, Hospital Administrator, East St. Louis
 Dr. Harlan English, Physician, Danville
 Dr. Theodore R. Van Dellen, Physician, Chicago
 I. R. Abbott, Hospital governing board, Decatur
 Elmer E. Abrahamson, Hospital governing board, Chicago.

Thus began and evolved an exciting chapter in the public health history of Illinois which has provided the state with an excellent chain of hospitals unsurpassed anywhere in design, character and quality of services and in convenience of location. Up to June 30, 1962 the Department had allotted to 155 projects an aggregate of \$57,547,899.34 of Federal and \$8,484,781.93 of state money. The total sum involved in the costs of the 155 projects was \$298,292,855.00. Not a breath of scandal has stained the record of the Department in the management of the construction program. Indeed the relations of the Department with hospital interests have been cordial from the beginning with no serious interruptions. All differences have been resolved without litigation and only one formal hearing has been invoked to settle a disagreement—the case of an applicant who was refused a license to operate a hospital. He didn't get the license.

Expressed as well as may be by the number of new beds added to the hospital facilities of the state by the 155 projects built with the aid of grants, the gains were as follows:

General hospital beds.....	9006
Chronic hospital beds	1224
Mental hospital beds	581
Nurses' dormitory beds	128
Nurses training school beds	998
Tuberculosis sanitarium beds	120
Nursing home beds	760
Rehabilitation center beds	96
Intern facility beds	38

THE STRUGGLE FOR OFFICE QUARTERS

For about 40 years after its creation in 1917, the State Department of Public Health was relegated, except for the general office, to make-shift, make-do space, the left-over from other requirements of the state government. It didn't get money enough during the first half of this period to attract substantial interest to its internal affairs. On the other hand, a steady growth caused the various offices to spill over from one location to another and multiply dispersion of personnel. At the onset of the war in December 1941, the space occupied by the Department was a shabby hodgepodge. An attic in the State House, a corridor and a basement in the Centennial building, a walk-up second floor apartment over a saloon, a second floor warehouse room and two converted dwelling houses were among the facilities which housed the various offices in Springfield at that time. Demands for space would be greater and less available as the war wore on. At the same time, public health service had begun to take on a dignity and respect which theretofore had not been widely recognized.

This was the situation when Dr. Cross started out on a valiant effort to correct the situation. One of the major recommendations coming out of the APHA survey in 1942 was that a public health building be constructed by the state to house the Department. On January 15, 1942, the members of the Board of Public Health Advisors, after having personally inspected the Springfield offices of the Department, which they found to be "deplorably overcrowded and widely scattered to the extent that efficiency is seriously impaired and the health of the employees jeopardized," adopted a strong resolution favoring the construction of a state public health building. Copies of the resolution were transmitted to the Governor and to the Post-War planning Commission.

The outcome was an appropriation in 1945 of \$2,162,000 for "the construction of a State Public Health Building in Springfield with fixed equipment installed." A complete set of architectural plans and blueprints was developed at a cost of about \$75,000 from money allotted to the Department by the U. S. Public Health Service. There the matter ended. On the site selected for the building were a dozen or more dwelling houses or more dwelling houses which would have had to be razed. An acute shortage of housing of all kinds prevailed as construction of civilian facilities had practically ceased during the war. Building material was at a premium. An economic inflationary wave was gaining momentum but was expected to recede within a year or two when production caught up with demands. The state Administration decided to postpone construction of new office facilities in Springfield until the situation improved. The money for the public health building lapsed.

A change for the better came in 1955. In that year, construction of a handsome, eight story, all-purpose state office building covering

about one-half of a city block was completed. The Department of Public Health moved into this building early in October, occupying all of the fifth and a part of the sixth floors. This warmly welcomed relief from an intolerable situation was not enough to solve completely the Department's housing problem. Neither the laboratories, which are housed partly in rented quarters and partly in the State House attic, nor the statistical offices which occupy hodgepodge space in the Archives and Centennial buildings, could be accommodated in the new structure. Warehouse space is also rented in Springfield. Even so, two other agencies—the State Auditor General and a section of the Board of Economic Development, have now crowded into the space originally assigned to and occupied by the Department of Public Health in the new office building. The desperate race between growth of government and the construction of new facilities to accommodate it continues with no end in sight. It appears that "never the twain shall meet."

NURSING HOMES AND KINDRED INSTITUTIONS

A mushroom growth during the early forties of the nursing home industry, brought on by profound sociological and economic changes, gave rise to governmental interest in this enterprise. Social Security and relief benefits to needy elderly people whose number was increasing rapidly, coupled with a trend toward smaller homes and the employment of women, caused householders with extra rooms and spare time to begin the practice of taking in as paying guests these older people whose family ties were broken. Soon the practice broadened to include chronically ill and convalescent patients and enterprising persons with an eye on profits began to convert large, obsolescent dwelling houses into nursing homes as a business. Welfare workers, especially agents of the Illinois Public Aid Commission which financed the care of many of these nursing home guests, began to report serious deficiencies in the nursing homes with respect to food, furniture, nursing care, recreation facilities and protection from fire hazards. Such observations led the Public Aid Commission to request the Department of Public Health and the State Fire Marshal to inspect the homes which housed recipients of its benefits.

Apprised of the situation and convinced that the nursing home industry would grow and expand, the Institute of Medicine of Chicago invited 15 health and welfare agencies to send representatives to a meeting in January 1945 to consider the proposition of state supervision over nursing homes. The outcome was the enactment of the nursing home licensing law, approved by the Governor on July 17, 1945. Administration was placed in the Department of Public Health which was given power to prescribe and enforce rules and regulations as to operation and minimum standards as to location, construction, personnel, sanitation and diet. Provision was made in the law for official

hearings in cases of disagreement about licenses and for an Advisory Council of 11 members, appointive by the Director of Public Health who was designated ex officio chairman. Subsequently the law was amended several times so as to broaden its scope and to include other facilities so that it is now legally known as the "Nursing homes, sheltered care homes and homes for the aged Act."

Dr. Cross assigned responsibility for administering the law to the Division of Sanitary Engineering which issued the first license on February 13, 1946. By June 30, 1946, a total of 95 licenses had been issued and six applications had been denied, two because of fire hazards and four because of the deficient character of the operators. Homes in incorporated communities which enforced local ordinances in conformity with state regulations, as determined by the Department, were exempt from state licensure prior to 1957. Thereafter, as required by an amendment to the law, state licenses were issued to such homes on recommendation of local authorities. Inspection and appraisal work was delegated from the outset to the Department's district units (later called regional offices) and to local full-time health departments prepared to accept the responsibility. On July 1, 1949 the administration of the program was transferred from the Division of Sanitary Engineering to the Division of Hospital Construction and services in order to consolidate the institutional licensing functions of the Department. In 1950, when the Department was reorganized, it became an administrative unit in what was called the Division of Hospitals and Institutional Services. Robert R. Cunningham, an engineer, has been in immediate charge of this activity from its inception. Through this machinery the Department has exercised regulatory supervision over nursing homes, sheltered care homes and homes for the aged.

The growth and improvement of the nursing home industry has paralleled in many respects that of the motel business and for much the same reasons, public demand. With respect to the improvement of nursing homes in Illinois, the Department of Public Health has played a dominant role. It has spent an enormous amount of time and energy in training and assisting the nursing home personnel and in helping the operators to help themselves raise the quality of services. In 1950, for example, through the initiative of the Department, the State Association of Nursing Home Operators was organized for the purpose of improving the standards of services. This Association, which is affiliated with the National Association of Nursing Home Operators, has cooperated and worked closely with the Department from its inception.

Administration of the nursing home program has been far from easy. Indeed the path leading to operational standards commensurate with the needs, the comfort, the safety and the dignity of the patients, or guests, has been rocky and laborious. The elimination of structural defects, especially as to fire hazards and the improvement of personnel

have been the two major difficulties to overcome, especially during the earlier years. Many of the homes had become entrenched in improvised housing constructed originally for other purposes while the wages offered for help were not attractive to well-trained personnel. At the outset, there was no law that required the licensure of practical nurses and very few registered nurses were attracted to duty in nursing homes. Thus, there was no legal standards by which to appraise the qualifications of most of the nursing homes personnel. On the other hand, the demand for these facilities was heavy and growing. Only in extreme cases was the outright closing of a home expedient or even practicable. The problem was attacked through education and persuasive tactics buttressed by the pressure of legal obligations. Nurses from the Department have been assigned to work in homes for periods up to a week or more on training missions. District meetings with operators have been conducted and annually an institute for nursing home operators is conducted jointly by the Department and the University of Illinois. In 1951 the Illinois Nursing Act was amended to provide for the registration of practical nurses. This has been extremely helpful in the formation and application of qualification standards for nursing home personnel.

Disagreements between the Department and individual operators about practices and physical facilities of "homes" have been many and often complicated over the years. Emotional and political factors have now and again brought on community-wide disturbances of minor magnitude in these cases when neither side would willingly yield to pressures. Subjects of dispute, which never involved more than a small percentage of homes, included almost every imaginable infraction of the regulations, ranging from cheating in money matters to dispensing narcotics illegally and from the employment of mental incompetents to the neglect of serious fire hazards. To solve these problems the Department has resorted to formal hearings in perhaps a score of cases while operators have initiated litigation in only two cases. In one of these the court remanded the case to another hearing which resulted in settlement; the other was ultimately resolved by attrition.

A raucus quarrel between the owner of a Rock Island nursing home and her husband, overheard by one of the resident patients, in which the man reportedly threatened mayhem on the patients in residence, resulted in a grand jury investigation of the situation. While no indictment was returned, the jury, after a visit to the home in question as well as to each of all others in the community, took occasion to roundly lecture in its report all concerned with the licensing of marginal "homes," of which the jury listed 3 among 11 visited by the jury in the Rock Island community. This was the other side of the coin of pressures which nearly always were brought to bear on the Department in cases where licenses were withheld or jeopardized.

Such problems as these notwithstanding, the Department worked its way through the jungle of mushroom growth with a high degree of goodwill and cordiality from "home" operators in general, and with measurable and steady improvement from the outset in the operation of "homes."

Unhappily, neither a license nor diligence of inspections relating thereto will prevent fires, the nightmare of those responsible for general supervision over "homes." Six fires of serious consequences have occurred involving facilities in each of the three categories of "homes" since the requirement of licensing started. The first occurred on January 30, 1959 when the fully licensed Glen Ellyn Acres Nursing Home in DuPage county was completely destroyed with the loss of eight lives by a fire attributed to defective wiring. The Houghlan Sheltered Care Home in Johnson City, which had qualified for a license was completely destroyed by fire on January 6, 1959, without loss of life. Then, on March 13, 1959, the Jennings Home for the Aged in Aurora, with application for renewal of license being held up pending installation of fire extinguishing spraying system, was completely destroyed by fire with the loss of four lives. On January 10, 1962, the Cox Sheltered Care Home at Marion was completely destroyed by fire with no casualties and the next day, January 11, 1962, the Dubach-Thomas Nursing Home in Freeport was partly destroyed by fire without loss of life. The Burgeois Nursing Home at Greenville was partly burned down on August 21, 1962, without loss of life.

The 1962 official directory of licensed 'homes' in Illinois lists 624 nursing homes with bed capacities ranging from 5 to 310, the majority ranging from 20 to 100, with 32 having more than 100 beds each. Of sheltered care homes there are listed 164 ranging in capacity from 4 to 52. There are 124 homes for the aged on the list, 46 having each a capacity of more than 100, the largest having 340 beds. The two smallest have 8 beds each.

Caring for the infirm, the aged and the chronically ill outside hospitals has come to be big business participated in not only by charitable and official agencies but by commercial interests as well. The facilities provided for these people in Illinois have improved enormously since the first licensing law was enacted in 1945. While the Department of Public Health has been a major influence in bringing about this improvement, the profit motive with respect to commercial interests and compassion with respect to charitable organizations have been influential also. A few of these institutions provide services approaching the ideal, exceeding by far the minimum requirements for a license. All meet the requirements as nearly as may be determined by the necessarily infrequent inspectional visits by representatives of the Department of Public Health. Most of them operate at capacity or near capacity.

POLIOMYELITIS

Poliomyelitis first began to plague the people of Illinois and the Department of Public Health as a serious public health problem in 1916 when the first recorded epidemic of that disease in this state occurred. It continued to do so thereafter, with gradually increasing intensity and prevalence, fluctuating from year to year but trending definitely upward, until after a preventive vaccine (Salk) became available in 1955. The average annual number of case reports during the period 1918-1940 was 316, the highest in any one year being 779 in 1937. The average annual number of case reports from 1940 through 1956 was 1631, the highest in any one year being 4001 in 1952. Epidemics were usually severe but localized, often affecting intensively only one or a few restricted areas in any year. Public concern about poliomyelitis, which far outran that about such serious and widespread diseases as pneumonia or syphilis, was generated more by the terrible crippling after-effects in many cases than by the number of cases. Various studies after 1930 revealed that poliomyelitis was the leading cause of physical handicaps among crippled children. Thus this disease was the subject of major interest to the Department of Public Health.

Efforts of the Department to deal with poliomyelitis pursued every line of action that offered any reasonable promise or hope of controlling the disease in any favorable respect, or in shedding light on its cause, mode of transmission or prevention. A technical advisory committee, consisting of the best informed polio specialists in the state, which was reconstituted from time to time, was maintained over the years to assist and guide the Department in applying and appraising the results of technical knowledge and in keeping abreast of new developments. Early diagnosis was vigorously encouraged on the grounds that permanent paralysis could be prevented or favorably modified by treatment applied soon enough. The rules required the isolation of patients and very careful disposal of waste matter. Detailed epidemiological studies were made in search of factors responsible for epidemic outbreaks. Convalescent serum was distributed free and its use in treating patients early after onset of illness was encouraged by the Department long after that procedure had been abandoned as useless by other states. Laboratory personnel of the Department participated importantly with the Michael Reese Research Foundation in a project, which began in 1939, aimed at the development and production of a preventive vaccine for polio and which was proved effective by a field trial that began in Morgan county in 1954. All of these activities were intensified and added to after the end of the war, due partly to a steady upward trend in polio prevalence and partly to great availability of resources. Except for the work on a vaccine, none of these efforts produced any measurable control over polio. Improvement in treatment methods may have reduced somewhat the severity and extent of permanent paralysis in many victims.

Illustrative of the alertness of the Department with respect to polio and the extent to which its resources were concentrated on epidemic situations is an account of what transpired at Centralia in 1949. A report from Dr. Cross to Governor Stevenson under date of July 20, 1949, succinctly describes the initial actions. It read as follows:

**STATE OF ILLINOIS
ADLAI E. STEVENSON, Governor
DEPARTMENT OF PUBLIC HEALTH
Springfield**

ROLAND R. CROSS, M.D.

Director

LESLIE W. KNOTT, M.D.

Medical Administrative Assistant

BAXTER K. RICHARDSON, A.B.
Senior Administrative Officer

July 20, 1949

Honorable Adlai E. Stevenson
Governor—State of Illinois
Building

Dear Governor Stevenson:

I wish to respectfully report to you concerning the action of the Department of Public Health with respect to an outbreak of infantile paralysis in Centralia and vicinity.

On Saturday, July 16, I was informed by the Department's District Health Officer in that area, Dr. Norman Rose, that some twenty odd cases of infantile paralysis had developed in Centralia and vicinity and that hospital facilities accessible to the area were insufficient to take care of the emergency. Inasmuch as the principal infantile paralysis season was just beginning, the possibility of a considerable increase during the next few weeks in the number of cases in the area could not be overlooked.

Conscious of the fact that a well adapted facility formerly occupied by the Sister Kenny Clinic was available in Centralia, I immediately authorized Dr. Rose to underwrite the opening of this facility which will accommodate at least 35 patients and could be enlarged to take care of 80 to meet the emergency. I authorized him to make commitments not to exceed \$25,000 so far as the resources of the Department of Public Health were concerned. Dr. Rose was instructed to make these arrangements through the City government inasmuch as payments by the Department would necessarily be to the City government.

Simultaneously I requested Dr. Leonard Schuman, who is Chief of our Division of Communicable Diseases, to seek the cooperation of Dr. Herbert Kobes, Medical Director of the Division of Services for Crippled Children, who is responsible for the expenditure of funds appropriated by the State for aid to sufferers of infantile paralysis, and of Mr. Andy Glosecki, the Illinois Director of the National Foundation for Infantile Paralysis, and also of the Illinois Chapter of the Sister Kenny Foundation. His efforts were entirely successful.

As a result of these actions, I went to Centralia on Tuesday, July 19, in company with Dr. Kobes, Mr. Glosecki and Dr. Schuman. In Centralia we met with Mayor Blanchard and others concerned and later with the City Council. As a result of these meetings all arrangements were made for opening the facility which will be known as the Centralia Emergency Polio Center. It is understood that the project will be financed in accordance with their rules and regulations by the Division of Services for Crippled Children, the National Foundation for Infantile Paralysis, the local representatives of these agencies and the Department of Public Health. The Illinois Chapter of the Sister Kenny Foundation has provided the

furnishings which are adequate and excellent. The Division of Services for Crippled Children will pay for the hospitalization during the acute stages of illness for all polio patients admitted to the facility who are eligible by reason of their financial circumstances for this aid. The National Foundation for Infantile Paralysis will do likewise and in addition will provide the services of a team of poliomyelitis experts from Northwestern University who will report to the Center not later than Friday of this week and will remain until a local organization is able to function without their help. The Department of Public Health will pay for such necessary expenses as are incurred over and above the resources of the other agencies involved.

The plan is to care for patients in the acute stages only. As soon as a patient reaches the convalescent stage, which usually takes place within ten to thirty days, he will be moved to one of the hospital facilities in the State which is prepared to take care of such patients. It is contemplated that the Centralia Emergency Polio Center will not need to be in operation for longer than a few months. In the meantime, I consider the opening of the facility as an essential necessity.

Personnel from the Department of Public Health, including one medical officer and four nurses, are on duty now at the Center and will remain so until sufficient personnel for handling the facility are recruited.

I heard while in Centralia many spontaneous and enthusiastic expressions of gratitude to you for the prompt action which was taken to meet this emergency and for myself I was especially pleased at the cooperative spirit on the part of Dr. Kobes and Mr. Glosecki and other agencies involved in meeting this situation.

Very respectfully yours,
/s/ Roland R. Cross, M.D.
ROLAND R. CROSS, M.D.
Director of Public Health

Shortly after opening, the Centralia Center was operating at capacity (42 patients) and required the services of 5 resident physicians, 3 medical students, 13 medical corpsmen provided by the Air Force, 43 nurses, 22 nurses aids and 3 nurse-physiotherapists. Of the 43 nurses, 5 were provided by the Red Cross, 5 by county health departments, 3 by the Air Force, 22 by the State Department of Public Health and 8 by local recruitment. At the peak of the operation 5 respirators were in use, flown in by the Air Force. When this emergency facility was closed on September 10, 1949, it had accommodated 237 patients for diagnosis and admitted for treatment 148.

This experience, together with previous difficulties in finding suitable hospital services for polio victims, led to the appointment by Dr. Cross early in 1950 of the Illinois State Polio Planning Committee, the functions of which were to coordinate the activities of the various agencies concerned with the diagnosis, treatment and hospital care of polio patients. On it were represented the Illinois State Medical Society, the American Red Cross, the Illinois Hospital Association, the Illinois State Nurses Association, the National Foundation for Infantile Paralysis, the Sister Kenny Foundation, the Illinois Division of the American Physical Therapy Association, the Division of Services for Crippled Children and the Department of Public Health. Through this Committee, arrangements were made with selected hospitals in all parts of the state to provide appropriate facilities for and the ad-

mission of polio patients. Thus by July 1950 arrangements had been made with 136 hospitals to provide services for polio patients as follows:

- 64 for diagnosis only
- 36 for diagnosis, isolation and treatment during the acute stage
- 12 for all services
- 24 for convalescence and rehabilitation

In these ways the Department guided developments so that in 1950 a well-coordinated system had reached the point where every polio patient in Illinois would have access to facilities that would provide promptly and efficiently the kind of care and treatment prescribed by the leaders of medical thought in that field.

In the meantime, research on a polio preventive was proceeding energetically at many points throughout the country. The first apparent breakthrough was announced early in 1953 when promising results were reported on the controlled, experimental use of gamma globulin, a blood derivative, among contacts of polio patients in several communities of Iowa, Texas and Utah. Although temporary immunity at best was indicated by the experience with gamma globulin, so eager was the public for protection against this fearful disease that a tidal wave of demand for gamma globulin developed by early summer of 1953. It exceeded the available supply so much that distribution of all the nation's gamma globulin was entrusted to the Federal Office of Defense Mobilization which rationed it out to states and restricted its use to household or schoolroom contacts of polio patients and pregnant women. Only in communities with a frank epidemic on its hands was mass inoculations with gamma globulin allowed. These restrictions and the abiding horror of polio only fanned the flames of popular demands for gamma globulin, which took on the characteristics of a "gold rush" stampede. This was the sort of problem wrestled with by the Department during the polio seasons between April 26, 1953, when the plan for distributing gamma globulin in Illinois was announced, and April 12, 1955, when success of the field trials of the Salk polio vaccine was publicly announced at Ann Arbor, Michigan.

The clamor for gamma globulin was only a mild prelude to what happened after the announcement on April 12, 1955 that a safe and effective vaccine for the prevention of polio was at hand, so proved by the inoculation of 200,745 second grade school children in all parts of the nation during the field trial project in 1954. The Illinois Legislature was in session at the time and promptly appropriated \$1,000,000 to the Department of Public Health for the purchase and free distribution of polio vaccine, this emergency legislation being approved by the Governor on April 29, 1955, only 17 days after the announcement at Ann Arbor. Congress likewise was quick to appropriate special funds for this purpose which, together with other convertible Federal money, gave Illinois \$2,208,204 from Federal sources for the purchase of polio vaccine during the year ended June 30, 1956.

Now there was plenty of money but little vaccine to be had. Manufacture was complicated and necessarily slow with a yield far below the demand. Strict rationing was promptly prescribed by the Federal government and entrusted to the National Poliomyelitis Advisory Committee of the U. S. Public Health Service. From the outset, throughout the scarcity period, available vaccine was allotted to states, batch by batch as produced, on a population basis and restricted, at first, for use in children in the 5 to 14 age group and in pregnant women. Federal regulations permitted one-half of the vaccine to go into commercial channels and one-half to official agencies, with optional privileges vested in the states. To assist the Department in preparing and executing an equitable plan for distributing vaccine in Illinois, Dr. Cross appointed a Poliomyelitis Vaccine Distribution Committee, representing all interests, and consulted also the Illinois State Medical Society which had a committee of its own on poliomyelitis. The outcome was a plan to ration vaccine to counties on the basis of the eligible population of each. Although not ratified in all details by the U. S. Public Health Service until October 1955, the plan went into effect on April 17, 1955, when the first batch of vaccine received by the Department was rationed to 75 counties. By the end of June, about 350,000 children had received the first dose of vaccine when, on advice of the Poliomyelitis Technical Committee, further vaccination was suspended until November 1, 1955.

Thereafter, owing to difficulties in regulating distribution according to plan, all vaccine available to Illinois was purchased, for several months, by the State Department of Public Health and rationed according to plan, although not without complaints which sometimes reached the point of outright controversy tinged with bitterness. By the end of 1956, after a hectic polio season and with vaccine more abundant, the demand fell off to the point where vigorous campaigns for promoting vaccination were undertaken. Age restrictions were removed, rationing to states by the Federal government was lifted and all but a small percentage of available vaccine destined for Illinois was diverted to commercial channels. Although demand for the vaccine continued to be brisk and rationing in Illinois remained theoretically in effect through the 1957 polio season, the great rush was over. Thereafter the job of the Department was to promote vaccination in persons up to 40 years of age, to appraise results and to refine techniques relating to the prevention of this disease. Case reports in Illinois declined to 307 in 1957, the lowest since 1939, and thereafter continued a downward trend, fluctuating from year to year.

While the vaccine developed by the Michael Reese Research Foundation never gained market currency, although proved effective by the vaccination of some 3,000 children in the Morgan county field trial, it was recognized by the Illinois State Medical Society as an important contribution. (The irradiation principle of inactivating potent

virus, as developed by the Michael Reese Research Foundation, was employed by one of the pharmaceutical houses in the production of large quantities of polio vaccine which was sold and utilized. At its annual meeting in 1955 the Society conferred on the research team of nine, including four from the Department of Public Health, its *Medical Progress Award* for the achievement of producing a successful polio vaccine. The virus used in this vaccine was inactivated by irradiation whereas formaldehyde was used by Salk to kill the virus used in his vaccine.

Through the cooperation of the Department with the National Foundation for Infantile Paralysis, DuPage and Peoria counties participated in the 1954 field trials of the Salk vaccine. In 1955, the Department also supervised, in behalf of a pharmaceutical house, field trials in DeWitt and Will counties of specially prepared lots of polio vaccine.

SCHOOL HEALTH

Astonished by a report of Selective Service that one-fourth of the eighteen-and-nineteen year old draftees in Illinois had failed to qualify for military duty because of health deficiency, Dr. Cross initiated in 1943 a movement to remedy the situation. His idea was that much could be accomplished in this direction through instruction and training in the schools. To explore the possibilities, he arranged for a meeting in Chicago on September 28, 1943, to which were invited many of the leading educators of the state as well as officials concerned with education. Those in attendance included the State Superintendent of Public Instruction, the Director of the Department of Registration and Education, the Presidents of the five State Teachers Colleges and Normal Universities, several members of the State Teachers Colleges Board and representatives of the Illinois Education Association and the Illinois Physical Education Association. The outcome of the meeting was the organization of what was known as the Joint Committee on Health in Schools whose function was to make a comprehensive study of school health problems and recommend action accordingly. On the Committee were:

- Dr. Roland R. Cross, Director of Public Health, *Chairman*
- Vernon L. Nickell, State Superintendent of Public Instruction
- Frank G. Thompson, Director of Education and Registration
- Dr. James H. Hutton, Illinois State Medical Society
- Dr. Lloyd C. Blackman, Illinois State Dental Society
- Dr. A. C. Willard, President, University of Illinois
- Dr. R. W. Fairchild, President, State Normal University
- Dr. Roscoe Pulliam, President, Southern Illinois State Teachers College
- Dr. Karl L. Adams, President, Northern Illinois State Teachers College
- Dr. Robert Buzzard, President, Eastern Illinois State Teachers College

Dr. F. A. Beu, President, Western Illinois State Teachers College

Lawrence J. Link, Executive Director, Commission for Handicapped Children

Irving F. Pearson, Executive Secretary, Illinois Education Association
C. O. Jackson, President, Illinois Physical Education Association

With the approval of Governor Green, Dr. Clair E. Turner, who was about to retire as Professor of Public Health at the Massachusetts Institute of Technology, was engaged in October 1943 to advise the Committee and direct its work. By January 1, 1944, ten sub-committees had been organized and to each assigned a specific topic for investigation and recommendations. Represented on the committees, seventy-odd members in all, were educators, administrators, public health, the medical and dental professions, nutritionists, nurses and several other interests. The outcome of the project was the publication in October 1944 of two reports in the form of manuals. They were:

1. A BASIC PLAN FOR STUDENT HEALTH AND HEALTH EDUCATION IN TEACHER-TRAINING INSTITUTIONS
2. A BASIC PLAN FOR HEALTH EDUCATION AND THE SCHOOL HEALTH PROGRAM.

Both were widely acclaimed and extensively used in Illinois. Within a year more than 30,000 copies had been distributed in response to specific requests.

Subsequently the Department provided subsistence stipends to several hundred selected teachers while in attendance on health education courses during summer sessions at several of the state teachers colleges.

Since its inception, the Joint Committee, which originally was organized with the idea of permanency, has undulated in vigor and action, depending on the personalities involved. The contribution of the original project on the school health program of the state was substantial and permanent. Subsequent revisions of the manuals and improvements of programs have been based on that foundation.

Implementation of the school health program has been from the outset a function of the Division of Maternal and Child Hygiene which was merged into the Division of Preventive Medicine in 1950.

INTERNAL ORGANIZATION AND DEVELOPMENT

The explosive growth and expansion of government at all levels after the mid-thirties, touched off by the great depression and thereafter, enhanced by the war, by technological advancements and by the emergency of an economy of abundance, brought with it a deluge of administrative problems for governmental agencies. These centered around personnel practices, office management and communications. Government found itself in keen competition with private enterprise in the recruitment and retention of personnel capable of performing

efficiently the highly technical regulatory and educational functions now being thrust upon official agencies at a rapid rate.

State government in Illinois, least of all the Department of Public Health, did not escape these problems. Steps taken by the state government to meet the situation included, in chronological order, the following:

1. Enactment in 1943 of a law creating for state employees a liberal pension system.
2. Enactment in 1943 of a position classification law, based on a preceding survey which established uniform pay ranges for state employees comparable to rates in non-official enterprise.
3. The creation by legislation in 1949 of a Commission to Study State Government, known colloquially as the "Little Hoover Commission" or the "Schaefer Commission." Its report and recommendations to the General Assembly resulted in legislation enacted in 1951 and thereafter which realigned, consolidated, eliminated and modified various functions and agencies of the state government. The principal effects of this on the Department of Public Health were:
 - (a) The abolition in 1953 of the Division of Hotel and Lodging House Inspection, long overdue as an obsolete state public health service function.
 - (b) The abolition in 1951 of the Division of Industrial Hygiene on the grounds that this activity was legally a function of the Department of Labor.
 - (c) The transfer in 1951 of authority to accept Federal mental health grants to the Department of Public Welfare on the grounds that all state mental health programs should be consolidated in one agency.
 - (d) The termination in 1951 of the privilege, or authority, of the Department of Public Health, to manufacture biologics for free distribution in the state. This prohibitive legislation was modified in 1953 by an amendment which authorized the Department to manufacture biologics at times when they "are not made readily available by private sources." Since that time the Department has engaged in manufacturing various biological preparations in considerable quantity without noteworthy opposition.
 - (e) The number of members of the State Board of Public Health Advisors was increased by legislation in 1951 from five to nine.
4. The adoption by legislation in 1955 of a State Personnel Code and the creation of a Department of Personnel to administer it. Among other things, the Department of Personnel was authorized to adjust salary schedules at any time as conditions dictated and it could approve on-the-spot employment of desirable applicants for state jobs.
5. In 1956 a comprehensive survey of paper work in the state government, and practices relating thereto, was made by the National Records Management Council of New York City. The purpose here was to increase operating efficiency by the reduction and simplification of paper work and an orderly disposition of accumulated files.

A major effect of all these and other general measures was to repose more freedom of administrative action, and therefore more responsibility, in the directors of the various departments of the state government. Prior to 1943, for example, the specific salary and title of every position in the state service were itemized in appropriation bills and neither could be changed for two years and then only with legislative approval. Then, until 1951, appropriations for personal services were made in lump sums to the various administrative units but employment was restricted to jobs covered by a list of position titles in each appropriation bill. Salaries, however, could be adjusted at any time within a range specified by law for each class of positions. Beginning in 1951, a department was restricted in recruitment only by the titles in the position classification law, the salary ranges therein and the department's resources. Even these restrictions were removed as prerogatives of the General Assembly in 1955 when the Personnel Code was adopted. Salary levels were increased from time to time along with these developments so that by 1962, the authorized pay rates of state employees compared not unfavorably with corresponding rates in industry and commerce. These developments gave directors considerable latitude in personnel and office management.

While these things were going on, Dr. Cross initiated and brought about some changes of his own in the Department of Public Health. Up to 1949 he had simply added superstructure on the organizational foundation of the Department laid out in 1917 by Dr. Drake. By this process the number of administrative divisions in the Department had increased, after 1940, from 10 to 16; the number of full-time employees had gone up from about 300 to about 650; the money at the disposal of the Department had increased, in round numbers, from \$2,300,000 for the fiscal year ended June 30, 1942, to \$10,500,000 for the year ended June 30, 1949; the scope and complexity of program activities had multiplied commensurately. Thus the organizational structure had become diffused, awkward and administratively complicated.

In 1949, Dr. Cross took a decisive step toward a remedy for the situation. With Governor Stevenson's approval, he invited the U. S. Public Health Service to make a management survey of the Department.

An expert team consisting of Paul E. Fox, Morrill B. Donnald and Daniel D. Swinney, guided by a staff of eight consultants from the U. S. Public Health Service, went to work on the project in September 1949. Every detail of administrative practice and management was examined and appraised in the course of this exhaustive study. On invitation, a delegation of 28 persons who were involved in the project, headed by Dr. Cross and Surgeon General Leonard A. Scheele of the Public Health Service, delivered a progress report to Governor Adlai Stevenson at a dinner meeting at the Governor's Mansion on February 20, 1950. A summary of the major recommendations growing out of the survey, as published on June 15, 1950, read as follows:



This group attended a dinner meeting at the Governor's Mansion on February 20, 1950, when a preliminary report of a management survey of the Department of Public Health by the U. S. Public Health Service was presented to Governor Adlai E. Stevenson. All who attended are shown in the picture and are identified, left to right:

- 1st Row: Dr. Leonard A. Scheele, Surgeon General, U. S. Public Health Service; Governor Adlai E. Stevenson; Dr. Roland R. Cross, Director of Public Health.
- 2nd Row: Dr. Lloyd Dodd*; Dr. Clifton Hall¹; C. W. Klassen¹; Mornil B. Donaldson**; Paul E. Fox**; B. K. Richardson¹; Dr. E. P. Coleman*; Dr. Leonard Schuman¹.
- 3rd Row: Dr. Edward A. Piszczek*; Dr. James K. Shafer²; Dr. Charles F. Sutton¹; Maude B. Carson, R.N.¹; Dr. Henrietta Herbolzheimer¹; Dr. John E. Chrietzberg¹; E. L. Wittenborn¹; Daniel D. Swinney**.
- 4th Row: Dr. Donaldson F. Rawlings¹; Kenneth Morse¹; Dr. Adolph Rumreich²; Edison Dick*; Dr. H. J. Shaughnessy¹; Dr. O. K. Sagen¹; George Hendrix¹; Dr. G. Howard Gowen¹; Dr. F. V. Meriwether².

* Member, State Board of Public Health Advisors

** Member, Survey Team

¹ Division Chief of Department of Public Health

² Officer, U. S. Public Health Service

SUMMARY OF MAJOR RECOMMENDATIONS

After a thorough study of the organization of the Illinois Department of Public Health and its management, the Public Health Service is making many suggestions and recommendations. If they are put into effect, improved administration and a more effective utilization of resources will result. The major recommendations are summarized as follows:

1. The Department should be reorganized as outlined in Chart 2.

Under this proposal the present divisions offering services to the Department as a whole would be recreated into the following offices under the Director of General Services; Administration, Public Health Education, Nursing, and Public Health Statistics.

The remaining divisions would be grouped into five bureaus on the basis of function. The Bureau of Personal Health Services would consist of the divisions of Tuberculosis Control, Maternal and Child Health, Public Health Dentistry, Industrial Hygiene, Epidemiology, Chronic Diseases, and Preventive Mental Health. The Division of Epidemiology would encompass the present functions of the Divisions of Venereal Disease Control and Communicable Diseases. The Division of Chronic Diseases would administer the cancer control and heart disease programs.

The Bureau of Hospital and Institutional Services would be responsible for hospital planning and construction and the institutional licensure and inspectional functions of the Department.

The present Division of Local Health Administration would be recreated as the Bureau of Local Health Services. It would be the channel through which all services to local areas are provided.

The Bureau of Environmental Health Services would encompass the present functions of the Division of Sanitary Engineering, with the exception of the Sanitary Engineering Laboratory which would be transferred to the new Bureau of Laboratory Services. Within the Bureau the following divisions would be established: Public Water Supplies, Stream Pollution, General Sanitation, and Milk and Food.

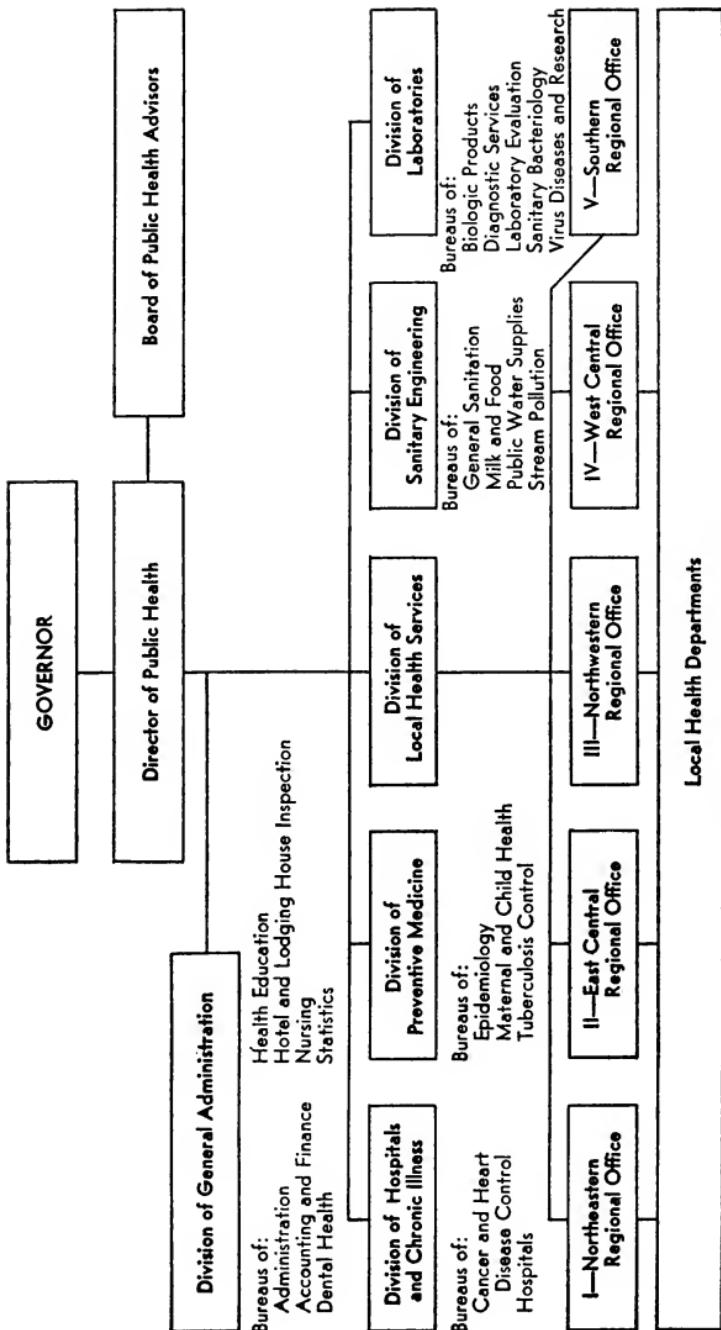
The Bureau of Laboratory Services would have the same responsibilities now held by the Division of Laboratories with the added responsibility for the Sanitary Engineering Laboratory.

2. Every effort should be made to provide quarters for the Department of Public Health in one building with adequate space for all of its headquarters activities and personnel.
3. Three new positions are proposed for the Office of Administration: an assistant to the Director of General Services to provide staff assistance to him in the over-all management of the Department, a business manager, and a procurement officer.
4. All fiscal management and procurement activities should be centralized in the Office of Administration.
5. A department-wide personnel management program should be developed.
6. The present record keeping activities of the Division of Venereal Disease Control and Communicable Disease should be revised and streamlined within the proposed Division of Epidemiology. Specific suggestions are made for such revisions.
7. A minimum of one full-time physician, one engineer, and one public health nurse should be added to the Bureau of Local Health Services. Their major responsibilities should be threefold:
 - a. To serve as generalized professional advisors to the Bureau in their respective fields of knowledge.
 - b. To serve as liaison with divisions of other bureaus.
 - c. To provide professional consultation to personnel employed in the district and regional offices and through these offices to local areas.

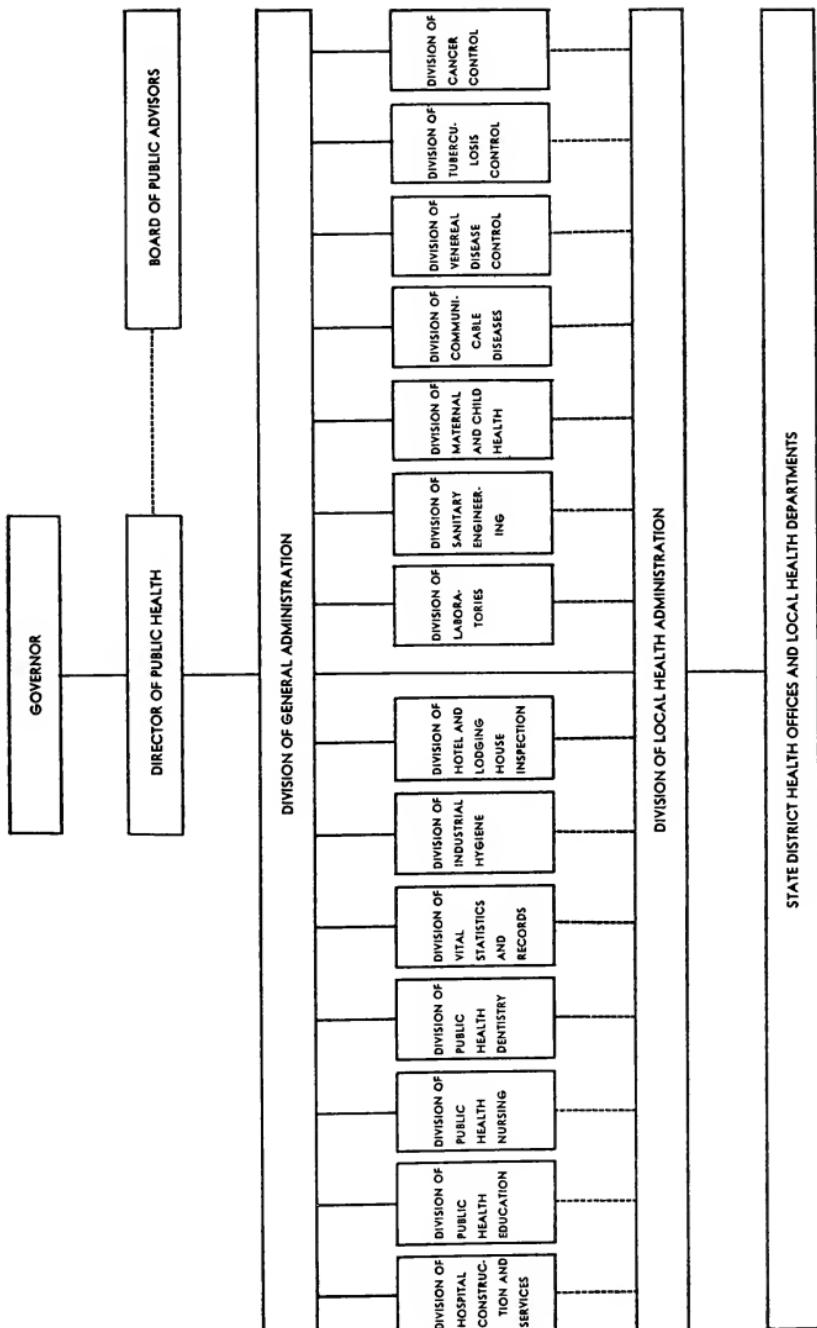
8. A qualified administrative consultant with broad experience in public administration and fiscal management should be employed by the Bureau of Local Health Services. This person should assist local officials in solving their legal and fiscal problems, participate in the development of State allocation formulae, and interpret State fiscal requirements to local health departments.
9. The content of the local health activity report should be re-evaluated in terms of the purpose and objectives of the reporting system.
10. There should be a greater decentralization of environmental sanitation activities to district and local health units.
11. Every effort should be made to recruit the recommended administrative and professional personnel that are urgently needed in the Office of Administration, the divisions of Epidemiology, Maternal and Child Health, Industrial Hygiene, Preventive Mental Health, Public Health Education and Public Health Statistics, and in the bureaus of Personal Health Services and Laboratory Services.
12. The authority for carrying out the responsibilities of the Division of Hotel and Lodging Inspection should be delegated to the full-time local health departments in Chicago and Peoria.

If the many detailed suggestions and recommendations are put into effect the clerical personnel of the Department can be reduced by from 40 to 50 persons, with an approximate saving of \$100,000. In making this estimate the survey staff did not consider additional needs for personnel due to program expansion. The estimated savings in the employment of personnel should be utilized for the employment of other categories of personnel that are recommended.

The outcome of the project was a complete reorganization of the Department which became effective on August 1, 1950. The 16 divisions were consolidated into six and the principal sub-administrative units were thereafter designated as bureaus. The organizational pattern before and after the reorganization is visualized in the accompanying diagrams.



As reorganized on August 1, 1950



Before reorganization of August 1950

Concurrent with the management survey, the Department started a reorganization of its field service. The 19 district health units were consolidated over a period of three years into 5 regional offices, the last of which was opened at Carbondale on August 1, 1951. The regional offices have larger staffs than did the districts and greater responsibility for executing locally the Department's programs. They are located at Aurora, Carbondale, Champaign, Rock Island and Springfield.

Before the reorganization, the divisions in the Department, and the chief of each, were as follows:

General Office, Roland R. Cross, M.D., *Director*
 Division of Local Health Administration, Charles F. Sutton, M.D., M.P.H.
 Division of Laboratories, H. J. Shaughnessy, Ph.D.
 Division of Communicable Diseases, Leonard M. Schuman, M.D., M.Sc.
 Division of Tuberculosis Control, Clifton Hall, M.D., M.P.H.
 Division of Cancer Control and Heart Disease, G. Howard Gowen, M.D., Ph.D.
 Division of Venereal Disease Control, Leonard M. Schuman, M.D., M.Sc.
 Division of Maternal and Child Health, Donaldson F. Rawlings, M.D., M.P.H.
 Division of Vital Statistics and Records, O. K. Sagen, Ph.D.
 Division of Public Health Education, E. L. Wittenborn, M.P.H.
 Division of Public Health Dentistry, John E. Chrietberg, D.D.S., M.P.H.
 Division of Public Health Nursing, Maude B. Carson, R.N., B.S.
 Division of Sanitary Engineering, C. W. Klassen, B.S.
 Division of Industrial Hygiene, Kenneth M. Morse, M.S.
 Division of Hospital Construction and Services, George K. Hendrix, B.S.
 Division of Hotel and Lodging House Inspection, Edward A. Guana

After reorganization on August 1, 1950, the divisional set-up was as follows:

1. Division of General Services, B. K. Richardson

Bureaus of:

 - Administration
 - Nursing
 - Health Education
 - Statistics
 - Dentistry
 - Hotel and Lodging House Inspection
2. Division of Personal Health Services, Leonard M. Schuman, M.D., M.Sc.

Bureaus of:

 - Epidemiology
 - Tuberculosis Control
 - Maternal and Child Health
 - Industrial Hygiene
 - Preventive Mental Health Services
3. Division of Hospital and Institutional Services, G. Howard Gowen, M.D., Ph.D.

Bureaus of:

 - Hospital Planning and Construction
 - Licensure and Inspections
 - Cancer Control
 - Heart Disease Control

4. Division of Local Health Services, Charles F. Sutton, M.D., M.P.H.

Regional Offices at:

Aurora
Carbondale
Champaign
Rock Island
Springfield

5. Division of Environmental Health Services, C. W. Klassen, B.S.

Bureaus of:

Public Water Supplies
Stream Pollution
General Sanitation
Milk and Food

6. Division of Laboratory Services, H. J. Shaughnessy, Ph.D.

Bureaus of:

Diagnostic Services
Sanitary Bacteriology
Biologic Products
Laboratory Evaluation
Virus Diseases and Research

Subsequently the names of several of the divisions were modified somewhat.

The central organization remained at the six-division level only briefly, however. Because of the character and volume of the work involved, coupled with considerable agitation from the dental and tuberculosis interests for status recognition, the Division of Dental Health was re-established in 1951 and the Division of Tuberculosis Control in 1952. For much the same reasons the Division of Milk Control and Veterinary Medicine was established in 1956. Since that year the number of operating divisions in the Department has remained at nine. New programs and activities requiring special administrative attention have been organized into bureaus attached to one or another of the nine divisions.

The reorganization brought to a highly commendable climax the long term plans envisioned by Dr. Cross and his staff at the outset of his administration. Achievements up to that point and later during his tenure embraced in large measure all of the recommendations, and more, that came out of the APHA survey of 1941.

NARCOTIC ADDICTS

A modest venture in the treatment of narcotic addicts began in 1951 when the Legislature, apparently on its own initiative, doubtless precipitated by a wave of public interest in the matter at that time, passed House Bill 1257, introduced jointly by nine members, which authorized the Department of Public Health to establish and operate three out-patient clinics in Chicago "for the treatment of persons addicted to narcotics," and appropriated \$90,000 to cover the costs thereof during the two years ended June 30, 1953. This bill became law but a companion bill, House Bill 1256, introduced by the same nine

members, which appropriated \$500,000 to the Department of Public Health for acquiring and operating, as a treatment and rehabilitation center of narcotic addicts, the Chicago Municipal Contagious Disease Hospital, was vetoed by Governor Stevenson, in line with recommendation by Dr. Cross and others, because, as he said in part, "I am convinced that this bill was passed without sufficient thought and planning, and that the appropriation reflects a totally inadequate and unrealistic conception of the treatment of narcotic addiction." Clinics were established in 1951 at Northwestern University Medical School, Provident Hospital and University of Illinois Medical School. The latter closed voluntarily in 1955. Because of unsatisfactory experience as to case load and measurable results, coupled with the enactment in 1957 of a comprehensive narcotic control law administered by the Department of Public Safety, the Department of Public Health discontinued the other two clinics in 1957. During the six-year span of this program, which was administered by the Division of Hospitals and Chronic Illness, 1163 patients visited the clinics which were operated at an aggregate cost to the state of \$345,200.

TRAILER COACH PARKS

Regulation of trailer coach parks became a legally required function of the Department of Public Health in 1953. The regulatory law enacted that year resulted from the profit motive interests of the Illinois Mobile Homes Association, an organization of manufacturers and sales representatives. Officers of that Association believed that their interests would be served best if wholesome sanitary facilities and protection from fire were made a requirement of parking grounds available to trailer coaches. This interest led to the enactment in 1953 of the law which requires the operators of trailer coach parks to obtain licenses annually from the Department of Public Health which has authority to promulgate and enforce minimum standards relating to the parks.

This work has been from the beginning thereof a major activity of the bureau of general sanitation in the Division of Sanitary Engineering. Inspections of parks increased from 990 in the first year to 1938 in the second and licenses issued went up from 122 to 613. Since then the number of inspections annually has necessarily remained high while the number of parks licensed has varied somewhat for two reasons. Some were closed because of failure to meet standards. Others came under the jurisdiction of municipalities and counties which qualified to enforce local ordinances. At the end of the fiscal year on June 30, 1958, all operating parks in the state contained an aggregate of 19,263 spaces for trailer coaches or mobile homes. Although enforcement of regulations has involved litigation only rarely, legal pressure has been invoked not infrequently. Substantial improvement in the

sanitary and safety features of trailer coach parks has resulted from the program. License fees collected are sufficient to make the operation financially self sustaining.

ATOMIC ENERGY

Use of atomic energy for non-military purposes first attracted the active attention of the Department of Public Health in 1947 when the University of Chicago announced plans for the construction and operation of the Argonne National Laboratory, a nuclear energy research institution. C. W. Klassen, chief sanitary engineer of the Department, promptly consulted with the architect of that project concerning structural facilities for the disposal of nuclear waste products potentially dangerous to the public health. Later, in 1955, he made contact with and was consulted from the outset about nuclear energy waste disposal by the Commonwealth Edison Company who at that time announced plans for the subsequent construction of the Dresden Nuclear Power Station, the world's largest, located on the Illinois River. Meanwhile a wave of popular interest in the advantages and particularly in the dangers of both peace-and-war-time use of atomic energy was building up because of national civil defense activities and the enactment by Congress in 1954 of the Atomic Energy Act which, among other things, created the Atomic Energy Commission in which was vested the over-all regulatory authority concerning nuclear energy. Developments on all sides soon created an avid public interest in radiation from whatever source and in a demand for scientifically accurate appraisals of risks and for the prevention of exposure to dangers from ionizing radiation, whether from fallout or the medical or commercial use of radioactive material.

Prompted no doubt by this course of events, the General Assembly created in 1955 an Atomic Power Investigating Commission, of which Dr. Cross was one of the 15 members, with obligation to report its findings to the General Assembly in 1957. Concurrently the Department of Public Health continued its active interest in the matter, co-operating with the Federal Civil Defense Administration in monitoring radiological fallout and with the legislative Commission in its study of the problem. Then, on February 1, 1956, the Department assigned an experienced engineer, Robert R. French, to full-time duty in evaluating the effects of the environment and on health of the industrial use of atomic energy. Subsequently, in 1957, as a result of the report of the legislative Commission, the Illinois Radiation Installation Registration Law was enacted and administration thereof placed in the Department of Public Health. Thus on July 1, 1957, a bureau of radiological health and air pollution control was officially established in the Division of Sanitary Engineering. This bureau, which handled the registration of over 6,000 radiation installations the first year, identified radiation hazards in radium processing industries, participated in

the appraisal of radiation from x-rays in dental offices and initiated various other studies about radioactive sources, was very active from the outset. Reports of its work were very helpful to a second legislative Atomic Power Investigating Commission of 18 members, including Dr. Cross as one of the six ex officio members, created in 1957.

The report of this Commission to the General Assembly resulted in the enactment in 1959 of two laws concerning atomic energy. One, an amendment to the Civil Administrative Code, vested in the Department of Public Health the authority "To regulate the uses of sources of ionizing radiation which are or may be detrimental to health." The other, known as the Radiation Protection Act, declared that the public policy of the state would be ". . . to encourage the constructive uses of radiation and to prohibit and prevent exposure to ionizing radiation in amounts which are or may be detrimental to health . . . ;" vested in the Department of Public Health the power to promulgate and enforce comprehensive rules and regulations concerning the uses of radiation and to engage in research and training activities relating thereto; created the Radiation Protection Council whose duty is "to assist in the formulation of and to review the policies and program of the Department as developed under authority of this Act and to make recommendations thereon and to provide the Department with such technical advice and assistance as may be requested." Of the 9 members of the Council, 2 are ex officio, the Director of Labor and the Chairman of the Commerce Commission; 7 are appointive by the Governor on the basis of their demonstrated interest in and capacity to further the purposes of the Radiation Protection Act. Members of the first Council were:

Roger A. Harvey, M.D., University of Illinois College of Medicine,
Chicago, *Chairman*

Robert S. Landauer, Sr., Ph. D., Certified Radiation Physicist,
Chicago

Byron J. May, D.D.S., Chicago

Ormas G. Smith, Chief Engineer, Chicago Area, Illinois Bell Telephone Company, Chicago

Professor Ross J. Martin, University of Illinois College of Engineering, Urbana

Robert J. Hasterlik, M.D., Association Director, Argonne Cancer Research Hospital, Chicago

John E. Rose, Sc.D., Director, Radiological Physics Division, Argonne National Laboratory, Lemont

Roy F. Cummins, Director, Illinois Department of Labor, Springfield (ex officio)

George R. Perrine, Chairman, Illinois Commerce Commission, Springfield (ex officio)

An appropriation of \$170,000 was made to the Department in 1959 for implementing the Radiation Protection Act. Since then a comprehensive program for dealing with this matter has been developed and

maintained. Although several bizarre situations have been encountered in connection with the radiation program, involving outright theft, accidental loss of radioactive substance and the daily fluoroscoping of employees to prevent theft, no serious administrative difficulties have arisen. The substantial dangers associated with inappropriate use of ionizing radiation resulting from accident, ignorance or carelessness has encouraged the cooperation of all concerned. From the first the Department has worked closely with the Federal and other agencies concerned with this matter. Mr. Klassen has been for several years a consultant of the Atomic Energy Commission.

STATE PLUMBING CODE

Promulgation of a state Plumbing Code became an obligation of the Department of Public Health in 1957 as a result of the enactment of three laws which evolved from the work of two Legislative Commissions created in 1953 and 1955, respectively. One of the laws obligated the Department to prepare, with the aid of a legally created representative advisory board, a state Plumbing Code which prescribed minimum standards as to fixtures, materials, design and installation methods. This was done by the Division of Sanitary Engineering and the Code was adopted by the Department in 1959. The other two laws authorized all municipalities and those counties served by full-time health departments, respectively, to regulate plumbing locally, subject to the provisions of the state Plumbing Code. By the end of 1962, forty-five (45) cities and two (2) counties had exercised the option of adopting the Code.

NECROPSY SERVICE AND TOXICOLOGICAL LABORATORIES

Responsibilities relating to the necropsy duties of coroners, and the operation of toxicological laboratories, became functions of the Department of Public Health as the result of three laws enacted in 1955, 1957 and 1959, respectively. The first, an amendment to the Civil Administrative Code, created in the Department an Advisory Board on Necropsy Services to Coroners. This Board, consisting of nine authorized members appointive by the Governor, held its first meeting on January 18, 1957, the appointment of seven members having been made on October 29, 1956. At that meeting the board initiated a successful campaign to bring about an amendment to the law in relation to coroners. This amendment, approved on July 9, 1957, made it the duty of the State Director of Public Health to appoint in each county, except Cook, on recommendations of the Advisory Board on Necropsy Service to Coroners, a physician whose duty is to perform all autopsies and medical examinations deemed necessary by the coroner and the examining physician in order to establish, in coroners' cases, the correct cause of death, and to submit reports thereon to the coroner and to the State Director of Public Health. The fact that some elected coroners were physicians

and personally performed the medical duties of their office, including autopsies, led to some difficulty in implementing the provisions of the amendment, as the Attorney General, on November 13, 1957, had ruled that a coroner, even though a qualified physician, could not legally be appointed to functions as a coroner's physician. Costs of autopsies, which counties were obligated to pay, and the scarcity of pathologist, likewise hindered smooth implementation of the amended law.

The Board, which met frequently for several years, was energetic and imaginative in its efforts to be helpful in the administration of the amended law in relation to coroners and to improve the standards of performance by coroners and all other involved in the determination of facts about any death resulting from suspicious, obscure or mysterious causes. To this end the Board prepared material for three excellent pamphlets, which the Department published and distributed to all concerned. The titles and date of publication were:

A MANUAL FOR CORONERS' PHYSICIANS—June 1958

A MANUAL FOR CORONERS—March 1959

A MANUAL FOR CORONERS' PATHOLOGISTS—August 1960.

The Board did not stop there. It initiated and piloted through the General Assembly a bill approved July 9, 1959, which authorized the establishment of toxicological laboratories in the Department of Public Health. The bill carried an appropriation of \$200,000 for this purpose. An experienced toxicologist, Dr. Robert Blanke, was appointed on July 1, 1961, to organize and direct this new laboratory service, undertaken primarily for the benefit of law enforcement officers. Special facilities constructed to house this unit as a part of the Department's general laboratories in Chicago, were dedicated on December 19, 1962. At that time, the work of setting up a toxicological unit in the attic of the State House in Springfield was in progress.

These three laws and the achievements thereunder marked the culmination of many years of study and effort by the Illinois State Medical Society to bring about the legal requirements of having medical judgment officially expressed in those phases of the work of coroners which involve medical problems and medical opinions.

The names of those who have served as members of the Advisory Board on Necropsy Service to Coroners, and their qualification requirements, appear in another chapter of this narrative.

MENTAL HEALTH

A program devoted specifically to mental health was started by the Department of Public Health in 1947 when the Legislature, on recommendation of Dr. Cross, authorized the Department to administer mental health grants from the Federal government made available by an Act of Congress approved July 3, 1946. Jurisdictional jealousy resulted, however, in an amendment to the law in 1951 which transferred this

administrative responsibility to the Department of Public Welfare. Annual Federal grants accepted by the Department of Public Health during the intervening four years were, respectively, \$147,564.00; \$186,706.90; \$216,450.04; \$172,395.00, the last sum being for the fiscal year ended June 30, 1951. Dr. Cross had initiated the legislation of 1947 on the grounds that mental health is inseparable from other phases of public health service and that Federal funds appropriated for the prevention of mental illness should, therefore, be utilized through the state's public health machinery.

This idea he proceeded to implement upon receipt of the first grant in 1947. Administration was placed in the Division of Maternal and Child Hygiene which was aided in developing a program by a high-level, very active and devoted advisory committee appointed in 1947 by Dr. Cross. On the committee, which met frequently enough to give serious and thorough attention to every phase of the program, were the following:

Dr. H. H. Garner, Psychiatrist, Chicago Medical College
Dr. Paul Hletko, Psychiatrist, Department of Public Welfare
Dr. Louis Jacobs, Psychiatrist, U. S. Public Health Service
Dr. Samuel Krainer, Psychiatrist, Illinois Psychiatric Society
Dr. Rudolph G. Novick, Psychiatrist, Illinois Society for Mental Hygiene
Ray Graham, State Director of Education for Exceptional Children in the Office of State Superintendent of Public Instruction
Dr. Oscar Hawkinson, Council, Illinois State Medical Society
Dr. E. A. Piszczek, Cook County Health Officer
Dr. R. W. Richards, Psychologist, Northwestern University
Dr. D. F. Rawlings, Department of Public Health
B. K. Richardson, Department of Public Health

Uses to which the money was put included subsidies to local mental health clinics and to local health departments, academic training of nurses for duty in mental health programs, in-service training of public health nurses, institutes for health officers, the publication and distribution of literature and the purchase and circulation of visual aids, including motion pictures. A series of monthly letters addressed to parents of newborn babies was developed and distributed through cooperating hospitals and local health departments. This program was continued with no substantial change by the Department of Public Welfare after 1951, except for considerable expansion when state money became available later.

In 1957, with Federal funds provided by the Children's Bureau, the Division of Preventive Medicine, through the bureau of maternal and child health, started a program aimed at helping mentally retarded children. This project, which used \$4,696 the first year, \$33,375 the second, and somewhat more than \$41,000 annually thereafter, is divided into two phases—the operation of a Child Development Clinic at Children's Memorial Hospital in Chicago and the in-service training of pub-

lic health personnel, particularly nurses, in matters relating to mental retardation. The purpose is the recognition, or diagnosis, of mental retardation at the earliest possible age of a child, an appraisal of the outlook for development of retarded children, medical treatment when indicated, and an adjustment of all concerned, especially the parents, so as to minimize emotional disturbances in cases where retardation creates serious problems. The Clinic, although it serves only Chicago and that not adequately, is the major factor in this program. A general service public health social worker on the MCH gives considerable attention to the work in retardation.

MIGRANT WORKERS

The health of migrant agricultural workers in Illinois was made the subject of a special project by the Department of Public Health in 1958. In February of that year, prompted by reports from staff members that all was not well with these itinerant crop pickers, about 15,000 strong, who labor in the state from early May until October, drifting from place to place, Dr. Cross authorized the Division of Local Health Service to initiate an exploratory program. He also appointed at the same time an advisory committee, made up of interested Department personnel, to assist in preparing and executing plans. On March 1, 1958, a seasoned public health nurse, Mrs. Ruth Markle, was assigned to handle the job. The Department of Agriculture and the Department of Labor were kept well apprised of proceedings as both had administrative interests in the situation. Voluntary agencies such as the Illinois Agricultural Association, the Illinois Canners Association, the Illinois Horticultural Association and the Illinois Vegetable Growers Association were consulted and kept informed, as were representatives of the Extension Services of the University of Illinois.

Field observations of prevailing conditions at migrant labor camps and interviews with farmers, fruit growers, canners and numerous individuals and agencies concerned, revealed, on the one hand, serious deficiencies as to housing, sanitary, medical and welfare facilities available to the migrants, and on the other, an expressed desire on all sides to improve the situation. Thus encouraged, the Department, with the cooperation of others concerned, prepared, published and distributed to all known employers of migrant workers a set of minimum standards titled "A Health, Housing and Safety Guide for Employers of Migrant Workers." Failure of this voluntary effort to solve the problem satisfactorily, although some improvement in that direction took place, resulted in the enactment in 1961 of the Illinois Migrant Labor Camp Law. This law, which was sponsored by the Illinois Agricultural Association and the Illinois Canners Association, incorporate in the statute the minimum standards set forth in the "Guide" and requires licenses, renewable annually, from migrant labor camp operators. The Division of Sanitary Engineering of the Department of Public Health is responsible for the administration of this law.

During the first year of operation under the law, covering the 1962 season, applications for licenses of 352 camps were submitted to the Department. Although graded for licensure only on two items, safety of drinking water and adequacy of waste disposal facilities, only 109 of the camps qualified on initial inspection for licenses while 7 camps were permanently closed. Later, after corrections were made, licenses were granted to 176 making a total of 285 out of 352 which qualified for licenses during the first season when requirements related only to water supply and waste disposal facilities. From this beginning it is apparent that the job ahead of bringing migrant labor camps in Illinois up to reasonably adequate standards is considerable.

Poison Control

A program for the control of accidental poisoning among children got started in Illinois in 1953 when Mercy Hospital in Chicago was designated as a poison control center, a place where the victims of accidental poisoning could get emergency treatment and from which physicians could obtain for emergency use specific information about the poisonous ingredients of any of the innumerable chemical preparations for household use such as insecticides, dusting powders, cleaning compounds and the like. This step, initiated by Dr. Joseph Christian of Stritch School of Medicine with the cooperation of the Chicago Board of Health, was the outgrowth of a nation-wide study made earlier by Dr. Edward Press for the American Academy of Pediatrics. Shortly thereafter, the same group, which included the Illinois Chapter of the American Academy of Pediatrics, designated St. John's Hospital in Springfield as a downstate poison control center.

These developments attracted the interest of state and local health officers in Illinois. This led to a survey in Chicago in 1954, conducted by the Chicago Board of Health with the help of an inspector from the State Department of Public Health assigned for that purpose. The outcome was the creation on July 1, 1956, of an administrative unit in the Division of Preventive Medicine, headed by Dr. Norman Rose, to conduct a state-wide program of poison control. From that date forward, any hospital with adequate facilities which so desired, and which agreed to report cases, was designated by the State Department of Public Health as a poison control center. Each center is provided by the Department with pertinent references, including a list of about 250,000 toxic or hazardous substances, identified by trade name, and antidote for each. From a start of one downstate and 10 Chicago poison control centers on July 1, 1956, the number has grown to 70 downstate and 10 Chicago centers on July 1, 1962. Case reports of accidental poisoning among children submitted to the Department by the centers increased from 88 in the first year to more than 9,000 in 1962.

In 1959 the Uniform Hazardous Substances law was enacted to supplement the poison control program and administration was placed

in the Department of Public Health. It resulted from testimony about the poison control program given by the Department before the Narcotics and Dangerous Drugs Investigation Commission of the Legislature, and the recommendations of that Commission. This law requires that hazardous substances be so labelled as to plainly indicate potential danger to health and to caution users about the risks involved. Subsequently similar laws were enacted by the Federal government, affecting products in inter-state commerce, and by several other states.

FLUORIDATION AND DENTAL CARIES

On February 23, 1945, a group of twelve high level municipal officials, and their advisors, of Evanston, led by Dr. Winston H. Tucker, the Commissioner of Health, met at the University Club of Chicago with Dr. J. Roy Blaney, Director, and Dr. R. Wendell Harrison, Dean of the Zoller Memorial Dental Clinic of the University of Chicago, to consider the proposition of adding sodium fluoride to the Evanston public water supply for the prevention of dental caries, particularly in children. Dr. Charles Deatherage, chief of the Division of Public Health Dentistry and Mr. James Wear, laboratory chemist, also attended the meeting as representatives of the Illinois Department of Public Health. The outcome of the meeting was a decision to begin as soon as practicable the fluoridation of the public water supply on an experimental demonstration basis which would continue for 15 years. A month later, March 13, 1945, the State Department of Public Health agreed to subsidize the project. Fluoridation of the water supply, which was preceded by a survey of prevailing dental conditions among children in Evanston and nearby Oak Park, started on February 11, 1947, and continued thereafter. Dr. Blaney was placed in charge of the project which was liberally subsidized from the beginning throughout the 15-year demonstration period by the State Department of Public Health. Surveys from time to time of dental conditions among children during the experimental period revealed a substantial reduction in carious teeth compared with conditions which existed prior to fluoridation in Evanston and concurrently in Oak Park where the water supply was free of fluorine. In this manner began the fluoridation of public water supplies in Illinois although the State Department of Public Health was not prepared when the Evanston project started to recommend the practice generally.

Favorable periodic reports from Evanston and several similar projects started about the same time elsewhere with encouragement from the U. S. Public Health Service, notably in Newburgh, New York, Grand Rapids, Michigan and Brantford, Ontario, led the Illinois State Dental Society on January 12, 1951, to adopt a resolution which reads, in part, ". . . that the Illinois State Dental Society endorses and encourages the fluoridation of public water supplies for communities in Illinois, provided such communities have the endorsement of the local dentists

and can meet the standards required by the State Department of Public Health for safe and efficient operation . . ." On August 8, 1951, the State Department of Public Health formally adopted a policy favoring, and launched an aggressive program of promoting, the fluoridation of public water supplies in Illinois. Although stubborn and sometimes bitter opposition to fluoridation of public water supplies developed in many communities and the proposition has been defeated several times when submitted to popular vote, 148 municipalities, including Chicago, representing well over 5,250,000 people, had begun the practice of fluoridating public water supplies by the end of 1962. Chester, in Randolph County, started in December 1951, the first except for Evanston. Then followed Waukegan, Carlyle, Beckemeyer, Carbondale, De Soto, Casey, Orion, Park Forest, Winnetka and Northfield, in that order, during 1952.

Preceding the campaign favoring the fluoridation of public water supplies, the Department, under the aggressive leadership of Dr. John E. Chrietzberg who had been appointed chief of the Division of Public Health Dentistry on January 1, 1947, and with the aid of the U. S. Public Health Service, had begun to promote the topical application of fluoride on the teeth of children. A demonstration program among school children in Edwards County was started in 1948 and thereafter extended into 49 counties during the next four years. Concurrently, in cooperation with the Dental College of the University of Illinois, a research study on the use of ammoniated and other dentifrices, and of brushing teeth regularly, was carried out over a period of two years among selected school children in Aurora and Peoria. This project failed to produce evidence of significant reduction in dental caries whereas substantial reduction in caries followed the topical application of fluoride. Although the demonstration projects were uniformly successful, and so publicized, the practice of topical application of fluoride to the teeth of children never became general in areas of Illinois where public water supplies are not fluoridated. Reports indicate that some 10,000 to 12,000 children are so treated annually in Illinois. Fluoride pills, which reduce tooth decay in children when taken daily for several years, are on the market but the extent of their utilization in Illinois is not known.

CASE STUDY OF MATERNAL DEATHS

In 1948 the Department, with the cooperation of the Maternal Welfare Committee of the Illinois State Medical Society, began the practice of assembling from the records and from interviews with physicians involved, all pertinent information concerning every death in downstate hospitals attributed to puerperal causes. This work, at the outset and until his retirement, was done exclusively by Dr. Charles Newberger, a physician on the staff of the Division of Maternal and Child Hygiene, through whose efforts the Maternal Welfare Commit-

tee, with the approval of the Council of the Illinois State Medical Society and of Dr. Cross, agreed to study and appraise the reports so obtained and to communicate their findings to the physicians concerned, especially in cases where death appeared to have resulted from preventable causes. During the first five years of this project, the proceedings of which were handled in strict confidence from the outset, information was assembled, appraised and utilized on 500 maternal deaths. The results were regarded so favorably that this work has been continued as a routine function. It is believed to have been a significant factor on the decline of maternal mortality in Illinois, which went down from 204 deaths in 1947 to 61 in 1961. The maternal death rate declined from 10.4 per 10,000 live births in 1947 to 2.6 in 1961.

GRADE "A" AND PASTEURIZATION MILK

Responsibilities of the Department as to the sanitation of milk supplies reached a climax in 1955. In that year were enacted two laws, sponsored jointly by the Department and organizations representing milk producers and processors. One required the producers of milk for the general market in Illinois to meet Grade "A" standards. The other provided that after June 30, 1957, only pasteurized milk could be offered for sale on the fluid milk market in the state. Administration of both laws was placed in the Department of Public Health. These laws brought upwards of 10,000 dairy farms under the purview of the Department and tightened its responsibilities as to receiving stations and pasteurization plants. The keen competition in the milk industry for markets and the inter-state complexion of distribution have complicated the administration of these laws and brought about a trend toward Federal participation in regulating the sanitation of milk supplies. The sanitation of milk supplies has been a major factor in Illinois of such diseases as scarlet and typhoid fever, infantile diarrhea and diphtheria.

RHEUMATIC FEVER PROJECT

A specific attack on heart disease was started in 1957 when the Department began the practice of providing, free of charge, prophylactic drugs (penicillin and sulphadiazine) for the treatment of indigent rheumatic fever patients to prevent recurrent attacks of that disease. This practice was authorized by a law, enacted in 1957 through the promotional efforts of the Chicago and the Illinois Heart Associations, which also appropriated \$150,000 to implement the program during the first two years. It has continued since that time. The drugs are distributed directly to patients on request of their physicians who also register the patients with the Department. A total of 2909 cases, to whom the drugs were sent until discontinued on advice of the physicians concerned, had been registered with the Department prior to 1959. Since that time, through 1961, the registration of new cases has ranged between 1200 and 1400 per year and the number of active cases on the register at the end of 1961 was 5202.

VETERINARY MEDICINE, ANIMAL EXPERIMENTATION AND RABIES

The control of animal diseases, several of which are easily transmissible to man, has been traditionally a responsibility of the Department of Agriculture. To control these diseases in man has been from the outset a function of the Department of Public Health. To establish appropriate liaisons between the two Departments with reference to these matters and to encourage research about diseases common to man and other forms of animal life, Dr. Cross, on May 1, 1948, appointed a veterinarian, Dr. LeRoy Davenport, to the staff of the Division of Communicable Diseases. From that date until his death in 1962, Dr. Davenport worked successfully with the veterinary medical profession, local health officers and the Department of Agriculture on the control of such diseases as rabies, brucellosis, trichinosis, psittacosis and encephalitis.

The use of animals for experimental purposes was a matter of long-standing and often bitter controversy, agitated by the anti-vivisectionists, led in Illinois for many years by Mrs. Irene Castle McLaughlin. To settle the dispute, into which the Department of Public Health was drawn from time to time, a law was enacted in 1951 to regulate animal experimentation and insure the humane treatment of cats and dogs in the laboratories. The law prohibits the use of animals for scientific experimental purposes except by institutions licensed to do so by the Department of Public Health, and it restricts the acquisition of animals by these institutions to unclaimed animals available from public pounds. Since this law became effective, no disputes of consequence about using animals for scientific experimental purposes has arisen in Illinois.

The possibility of effectively controlling rabies, which had seriously plagued Illinois for many years, was greatly improved in 1953 by the enactment of the "Rabies Control Act," a law which requires the annual vaccination of all unconfined dogs and the alternative disposal of unvaccinated dogs. While the enforcement of this law, which also authorizes the local quarantine of all dogs upon the outbreak of rabies, is vested in county boards under the general supervision of the Department of Agriculture, the Department of Public Health supported its enactment and has used it to good advantage in the suppression of rabies. Although rabies is still (1962) far from eradicated among various forms of animal life, no case in man has been reported in Illinois since 1954.

In July 1955, the veterinary work of the Department of Public Health was combined with that relating to milk, forming the bureau of milk control and veterinary public health in the Division of Sanitary Engineering, with Dr. Davenport in charge. Late in 1956 the Division of Milk Control and Veterinary Public Health was created by executive action of Dr. Cross and all work of the Department concerned directly with those two subjects was concentrated therein.

IN-SERVICE TRAINING

Formalized in-service training for personnel of the State Department of Public Health, and of local health departments, has been provided by the Department in varying degrees since 1917. During and after World War II, this function was substantially expanded and intensified because of (1) technical developments, (2) increased demands for public health services and (3) the shortage of experienced personnel. In-service training opportunities offered by the Department have taken various forms ranging from seminars and workshops to classroom courses and field assignments under direct supervision. Selected personnel from state and local levels have been assigned from time to time to short-term training duty at universities and training centers, such as the Communicable Disease Training Center at Atlanta, Georgia, operated by the U. S. Public Health Service. Faculty members of the University of Illinois have been engaged to conduct classroom courses at Springfield for clerical and other personnel while the University of Southern Illinois has conducted workshops in health education projects. Administrative personnel have been assigned for training to seminars conducted by the State Department of Personnel and by the U. S. Public Health Service. The Division of Sanitary Engineering has been particularly active and persistent in providing training opportunities through seminars and on-campus classroom instruction at the University of Illinois for the operators of local water supply and sewage disposal plants. The laboratories have conducted various types of in-service training courses for its own personnel and that of local laboratories and local health departments as well.

One particularly ambitious effort was started on September 25, 1950 at Bloomington, as a permanent facility for the practical field training of sanitation personnel. It was undertaken jointly by the U. S. Public Health Service which furnished two full-time training officers to administer the program; the Illinois Department of Public Health which furnished instructors, paid the rent on housing, subsidized trainees from local health departments in Illinois and advertised the project; the University of Illinois which provided lecturers; and the McLean County Health Department which furnished personnel to lecture and conducted field demonstrations. Instruction in all phases of environmental sanitation over periods of 12 weeks was offered free of tuition costs to employees on the inspector level of midwestern health departments, state and local. Several shorter courses to meet special demands, particularly of milk sanitarians, were offered also. Although most of the milk and dairy inspectors and inspectors of general sanitation from the full-time local health departments in Illinois took advantage of the opportunity, very few from other states matriculated and the facility was closed at the end of March 1953 for lack of trainees.

Since that time no attempt has been made by the Department to operate a permanent organization devoted exclusively to training. To meet the constant need for in-service training, advantage is taken by the Department of the excellent specialized facilities maintained by the U.S. Public Health Service, of on-campus and extension facilities of the state universities and of its own organization to provide individual and group in-service training for public health workers in Illinois as needs arise and as circumstances dictate.

FIRST AID STATION

In 1947, the General Assembly, apparently on its own initiative, passed House Bill 366, approved June 24, 1947, which authorized the Department of Public Health to establish and operate a first aid station in the State Capitol and appropriated \$15,000 for the expenses thereof during the ensuing two years. The station was established first in the corridor on the second floor of the State House and later removed to the ground floor of the State Office Building in a room designed especially for it. Mrs. Norma Chambers, R.N. has been in charge of the station from the beginning. Later, owing to the inconvenience to legislators during sessions, a second station with a full-time nurse on duty was established in the State House. Not a few emergency cases and a relatively high incidence of casual complaints among state employees have kept the two nurses busy. The station in the State Office Building is used also as a yellow fever vaccination center, which the Department is authorized to operate.

V.D. AND RAPID TREATMENT

The entire complexion of the Department's venereal disease control program began to change on November 1, 1945, when a plan was launched for substituting *rapid treatment* instead of the traditional method of treating infected patients which had prevailed up to that time. With rapid treatment techniques, made possible by the advent of penicillin, patients infected with gonorrhea could be discharged as non-infectious within a matter of hours, while those infected with syphilis could be dismissed within eight or ten days instead of only after months and years of treatment. This speed-up simplified enormously the functions of the Department with reference to venereal diseases which include (1) case detection, (2) providing treatment facilities for the indigent and (3) making sure that patients are non-infectious before released from surveillance. Within a few months after the adoption of the new plan, rapid treatment facilities had been established by the Department in 22 downstate hospitals where eligible patients were treated by designated physicians on a fee for service basis. More efficient and less costly, this system began to replace gradually the 33 downstate subsidized venereal disease clinics in operation at that time and the last of these were discontinued on June 30, 1953.

Under the impact of the venereal disease control program, including the effect of the laws relating to premarital and prenatal blood tests, two of the most devastating forms of syphilis, congenital and that of the central nervous system, have declined substantially. Reported cases of the latter went down from 974 in 1953 to 215 in 1961, and of the former, from 128 to 41 in children under five years of age. Other forms of syphilis have declined less dramatically, case reports per year in Illinois having ranged down and up from 8024 in 1952 to a low of 4323 in 1955 and 6543 in 1961. During the 10 years ended with 1946, case reports of all forms of syphilis per year ranged from a low of 21,675 to a high of 28,349. From these data it seems that the prevalence of syphilis is currently (1962) running about 75 per cent below what it was during and immediately preceding World War II. Case reports of gonorrhea now range somewhat above 20,000 per year, only moderately below previous high peaks.

REAPPOINTMENT IN 1949 AND 1953

When Adlai Stevenson was elected Governor of Illinois in November 1948, Dr. Cross had attained, during eight years as Director of Public Health, a degree of popularity rarely achieved by a state officer of his rank. His administrative record was excellent, he had shunned politics and he enjoyed the active good will of the medical profession and the public generally. Even so his reappointment was by no means assured. Stevenson's downstate campaign manager, Paul Powell, wanted Dr. Cross replaced. The Illinois State Medical Society and the Illinois Hospital Association wanted him retained. All three exerted their influence energetically. Dr. Cross, characteristically, gave his undivided attention to the affairs of the Department of Public Health as though no election had taken place. Then on June 1, 1949, while the General Assembly was still in session with several far-reaching public health proposals under consideration, Governor Stevenson announced reappointment of Dr. Cross and that action was cheerfully confirmed by the Senate.

Four years later, when Mr. Stevenson was running for President and the election of a new Governor of Illinois approached, the question of retaining Dr. Cross as Director of Public Health scarcely arose. It appeared to be taken for granted generally that he would be. This turned out to be the case. Shortly after the election on November 4, 1952, Governor-elect Stratton quietly informed Dr. Cross that he would be retained and a public announcement to that effect was made on December 22, 1952. With the re-election of Governor Stratton in 1956, no question as to the reappointment of Dr. Cross arose and he continued as Director of Public Health until his death, after a brief illness, on November 28, 1959 at the age of 71.

During his tenure of more than 19 years, a considerable body of constructive legislation concerning public health was enacted. Included

among those subject to administration by the Department of Public Health, in addition to many amendments to laws already on the books, are the following:

1. The County Health Departments Act.....	1943
2. The Nursing Homes Licensing Act.....	1945
3. The Hospital Construction Act.....	1947
4. State Tuberculosis Sanitarium Act.....	1947
5. Local Tuberculosis Sanitarium Subsidy Act.....	1949
6. Public Water Supplies Act.....	1951
7. Hospital Licensing Act.....	1953
8. Trailer Coach Parks Licensing Act.....	1953
9. The Grade A Milk Law.....	1955
10. Anti-Poliomyelitis Vaccine Law.....	1955
11. Radiation Installation Registration Act.....	1957
12. Plumbing Code Act.....	1957
13. Prophylactic Service for Rheumatic Fever Victims Act	1957
14. Radiation Protection Act.....	1959
15. Toxicological Laboratory Service Act.....	1959
16. Uniform Hazardous Substance Labelling Act.....	1959

The extensive regulatory authority vested in the Department by these and other laws caused a considerable change in the character of its work, making professional and technical expertise of personnel more important to efficient operation than mere number. Through legislation, reorganization, the adoption of new procedures and techniques, and an extensive personnel training program, the public health service facilities of Illinois, state and local, were adapted to the technological era which was just beginning to unfold in full flower at the time Dr. Cross first became Director of Public Health on October 19, 1940. The striking reduction in the prevalence of preventable diseases and mortality therefrom during this period indicates a high degree of success of the public health program.

FINANCE AND PERSONNEL STRENGTH

Nothing measures more emphatically the remarkable growth and expansion of the State Department of Public Health during the incumbency of Dr. Cross than the increase in money placed at its disposal. Here are the figures for the first, media and final biennial budgets authorized during that period.

BUDGETS, DEPARTMENT OF PUBLIC HEALTH

Biennium	1941-1943	1951-1953	1959-1961
State Money	\$2,263,921	\$17,673,758	\$19,481,601
Federal Money	2,245,158	8,251,867	15,403,552
	<hr/>	<hr/>	<hr/>
	\$4,509,079	\$25,925,625	\$34,885,153

Numerous factors were responsible for the unprecedented developments in public health services during those particular years. Among

them were (1) technological advancements which caused a rapid increase in both the opportunity and demand for more and better public health protection; (2) the emergency of an economy of abundance which made financing possible; (3) the almost sudden assumption by the state of long-neglected obligations as to public health; and (4) the accelerated participation of the Federal government in the state's public health program. Although substantial, the growth of the organization of the State Department of Public Health was not commensurate with the budgetary increase. Of the funds available for 1959-1961, for example, \$11,936,366 was allotted to local communities for the construction of hospitals while \$5,600,000 went as subsidies to local health departments and tuberculosis sanitarium boards, two important activities described elsewhere in this narrative. Much the same was true of the budget for 1951-1953. Salaries paid by the Department in 1960, moreover, were at rates at least double those of 1941, and costs of supplies were much higher.

The complexion of the operations of the Department also changed substantially during this period. Regulatory responsibilities, such as licensing of various institutions and attention to environmental sanitation increased enormously. The number of full-time local health departments went up considerably, relieving the state of much routine direct service. As a result of these changes fewer physicians and nurses in proportion to the Department's obligations were needed. The functions of the Department became more and more supervisory in character so that expertness rather than size of staff was of dominant importance. Indeed the number of full-time employees in the Department, exclusive of the Chicago and Mt. Vernon state tuberculosis sanatoria, declined from a post-war maximum of 711 in December 1949 to 619 in December 1959; although the number of professional public health personnel employed in Illinois increased during this period because of the growth of local health departments. The way this decline affected the numerical strength of the professional and technical staff of the Department, exclusive of tuberculosis sanatoria, is shown in the following statistics:

Full-time	M.D.'s	R.N.'s	Engineers	Laboratory, Technical
December 1949	... 17	46	44	73
December 1959	... 13	30	32	91

These data remained unchanged up through January 1962 except for the addition of four engineers and two technical laboratory workers.

THE FATHERREE INCUMBENCY 1960 - 1961

On February 1, 1960, Dr. LeRoy L. Fatherree, a graduate of the Harvard School of Public Health, became Director of Public Health, succeeding B. K. Richardson who had been *acting* Director for two months and disqualified for the position for lack of a medical degree. At the time of his appointment, Dr. Fatherree was in charge of the Champaign-Urbana Public Health District and previously for several years had been in charge of the Will County Health Department. The duties and responsibilities of both positions brought him into frequent contact with the State Department of Public Health and he was active in the various public health agencies of the state. Thus he was thoroughly familiar with the public health situation in the state. Appointed as Assistant Director at the same time was Dr. Roger F. Sondag, M.P.H., a regional health officer on the staff of the Department and previously for several years in charge of the Jackson County Health Department.

These appointments came at the beginning of the last year of the administration of Governor William G. Stratton, who failed in a bid for a third term and the tenure of Dr. Fatherree terminated on August 31, 1961. During his brief incumbency, Dr. Fatherree made only minor changes in the organization, policies and programs of the Department. Legislation enacted by the General Assembly in 1961 increased somewhat the appropriations of state money to the Department and reposed in it some new administrative responsibilities. Among the new laws passed at that time which affect the Department directly are the following:

1. A new Vital Statistics Act which modernizes the system of collecting and preserving records of births and deaths.
2. The Migrant Labor Camp Licensing Act.
3. An Act requiring the registration of marriages, divorces and annulments of marriages with the Department of Public Health.
4. An Act authorizing additional water resources investigation in the northeastern metropolitan counties and naming the Department of Public Health to participate therein.
5. An Act creating in the Department of Public Health the Northeastern Illinois Metropolitan Area Air Pollution Control Board.

The Civil Administrative Code was amended so as to include graduation from a School of Public Health and certification in public health

by the American Board of Preventive Medicine among the required qualifications of the Director of Public Health.

State funds appropriated to the Department of Public Health in 1961 amounted to \$19,713,579 against \$19,481,601 in 1959, an increase of \$231,978. Accounting for the increase was \$175,000 for capital improvements at the Chicago and Mt. Vernon State Tuberculosis Sanitariums; \$60,000 for administering the concurrently enacted marriage registration law; and \$5,000 for financing the Department's participation in the concurrently authorized investigation of water resources. A 1959 appropriation of \$200,000 for subsidizing local cancer control programs was dropped as such in 1961, the money being integrated into the general budget.

Personnel strength in the Department, exclusive of the tuberculosis sanitariums, was up from 618 in December 1959 to 636 in December 1960 and 639 in December 1961. The increase was accounted for largely by the addition of 15 radiological detection technicians, authorized by new legislation in 1959.

Federal grants to the Department for each of the two years ended on June 30, 1961 and 1963, respectively, were considerably higher than for any previous year, amounting to \$7,718,813.95 and \$8,982,730.46, respectively. Federal money for financing local programs of chronic disease control became available for the first time in July 1961 and the Department accepted a grant of \$253,500 for that purpose and initiated this new activity accordingly.

THE YODER DIRECTORSHIP

1961 -

A native of Wyoming with a rich background of experience in medical, public health and educational affairs, Dr. Franklin D. Yoder became Director of Public Health of Illinois on September 1, 1961 at the age of 48, appointed by Governor Otto Kerner with the enthusiastic endorsement of the Illinois State Medical Society. A graduate of Northwestern Medical College in 1939 and the School of Public Health of the University of California in 1948, his primary employment experience included five years of private practice; three years as flight surgeon in the Army; ten years as Director of Public Health of Wyoming; and two years as Director of the Division of Environmental Health of the American Medical Association at Chicago. His secondary background activities included eight years as a member of the Western Interstate Commission for Higher Education; three years as secretary-treasurer and one as president of the Association of State and Territorial Health Officers; faculty assignments at the University of Wyoming, Northwestern University and the University of Illinois; and membership on boards, delegations and committees of various state, national and international agencies.

Dr. Yoder brought a dynamic personality and an infectious enthusiasm to the Department, to give it renewed vigor and needed re-orientation. The Department had reached a crossroads of a sort, or at least a fork in the road, and had hesitated in forward thrust. The public health program had reached or was approaching the goals that it had been originally designed to achieve—the suppression of epidemic and infectious disease. Cholera and yellow fever had long since been banished from Illinois. Malaria was gone. No case of smallpox had been recorded for 14 years. Diphtheria was all but eliminated. Polio was well along on the downgrade. Tuberculosis, although still a big problem, was but a shadow of what it once had been and adequate machinery of dealing with it was in operation. The fatal risk to a woman of having a baby was nearly nil and the chances of survival of a baby were far greater than would have seemed possible 25 years earlier. Communicable diseases in general were under control to a much greater degree than ever before albeit the viral infections had gained considerable prominence as increasingly recognized factors in chronic diseases.

These successes, however, applied mostly to young life. Many more people, proportionately, were surviving through middle-life and beyond. This aging process brought with it an immense problem of

chronic and disabling ailments—arthritis, heart disease, cancer, diabetes, etc. The mushroom growth of the nursing home industry, which in 1962 had an inmate population exceeding 25,000, mostly dependent physically, and the unprecedented demands on hospitals, bear witness to the magnitude of this new phase of the public health—or the lack of it.

Here was a real challenge to public health agencies, which, nonetheless were now as well prepared to tackle the chronic ailment problem, difficult and massive as it is, as they were to tackle communicable diseases in 1877, when the Illinois State Board of Health was originally established.

Another change of enormously complicating impact on the facilities for maintaining public health and the demands thereon, is the growth or urbanization, the concentration of great masses of people such as prevails in the metropolitan area centered in Chicago. This, together with industrialization and the advent of the nuclear age, has created problems of the first magnitude in environmental sanitation, particularly as to water and air.

Too, public health was heading into some revised concepts of financing, brought about by the administration in Washington. The "project" philosophy of financing was gaining momentum—a philosophy of direct Federal allotments to State and local official and voluntary health and education organizations initiated by State or local preparation of written plans and channeled through the State Health Departments, eventually reaching special committees in Washington for approval or otherwise. Such projects covering community health services and research were establishing a new relationship between the Federal government, States and local communities. The advent of project financing led to the coinage of the word "grantsmanship"—the inference being that semantics played a major role in whether or not final approval would be forthcoming. Some looked upon the "project" philosophy as a way to bypass the States and place controls at the Federal level.

The time had come in public health administration to shift gears; to reorient the line of avance; to change emphasis in programs; to adopt organization and services to a newly developed situation.

This was the situation when Dr. Yoder became Director of the State Department of Public Health on September 1, 1961. Sensitive to the need for relentless vigilance in order to maintain the ground gained against communicable diseases and to go further in that direction, he recognized the inescapable responsibility of the Department of Public Health for pressing forward against chronic ailments and the newer and growing problems of environmental sanitation. He began at once to shape his policies and program accordingly. His plans proposed to:

1. Maintain, and accelerate as needed, the ongoing activities of the Department.
2. Launch a comprehensive program against chronic ailments.
3. Emphasize environmental sanitation over and beyond the on-going programs.
4. Step up specialized training, particularly as to rehabilitation.
5. Extend full-time local health departments.

By the end of 1962, he had reactivated, through Governor Kerner, the State Board of Public Health Advisors which had held three fruitful meetings. Early in the year he had designated a long-time employee of the Department, E. L. Wittenborn, as Assistant to the Director, and made other changes in order to take better advantage of programs and administrative talents. He increased considerably the financial commitments from Federal grants to local communities for initiating or expanding chronic ailment projects, and to individuals for specialized training in that field. He established favorable relations with the various agencies, official and voluntary, with direct interests in the public health program; brought about a high level of morale and esprit de corps among the Department's personnel; and had laid out a legislative program. The outlook for a constructive and progressive administration was promising.

DIVISION DEVELOPMENT AND ADMINISTRATIVE PERSONNEL

In 1927 the Department of Public Health consisted, organizationally, of nine divisions, not counting the general office. As resources grew and new obligations were assumed, the number of divisions increased until in 1950 there were 15, exclusive of the general office. Then on August 1, 1950, as a result of a general reorganization of the Department, the number of divisions was reduced to six, each of which consisted of one or more internal operating units called bureaus. Subsequently three of these bureaus were given division status so that in 1962 there were nine divisions. A brief account of all of the operating units which had division status during the period under review, and the names of the persons who have headed them, are herebelow recorded. First will appear in alphabetical order except for the general office, the nine division which were functioning in 1962 and after them, in alphabetical order, will come those which ceased to have division status.

All of the men who served the Department as Director between 1927 and 1962 are listed in the introductory chapter of this narrative. The names of those appointed to the position of assistant director during this period are:

- Dr. Thomas H. Leonard, Lincoln, 1927-1929
- Dr. Albert Baxter, Springfield, 1930-1937
- Dr. Roland R. Cross, Dahlgren, January 16, 1940- October 19, 1940
- Dr. Paul R. Huber, Chicago, October 25, 1940-February 1, 1941
- Dr. H. L. Pettie, Morrison, October 14, 1941-October 31, 1942
- Dr. Jerome Sievers, Springfield, September 1, 1943-January 1, 1944
- Dr. Roger F. Sondag, Murphysboro, 1960-1961

Governor Green allowed the office of assistant director to remain vacant during most of his two terms. Governor Stevenson appointed no assistant director. Governor Stratton appointed none until February 1, 1960, the last of his administration. At the end of 1962, Governor Kerner had appointed no assistant director. Among these assistant directors, only Dr. Baxter and Dr. Sondag were assigned any major administrative responsibility while in that office.

DIVISION OF GENERAL ADMINISTRATION

Aside from the Director, the general office in 1927 had a clerical staff presided over by a chief clerk, an elderly gentleman, Mr. Amos Sawyer, who had held the position since 1900, who managed the De-

partment's budgets, personnel and accounting. Upon the death of Mr. Sawyer on August 23, 1939, Wilbur Mirus was promoted from the clerical staff to chief clerk, a position he held until it was abolished on December 14, 1940. On that date the position of *senior administrative officer* was created and B. K. Richardson appointed to fill it. He remained in that position until January 31, 1960 (serving as acting director concurrently for the last two months), when the duties were assumed by the newly appointed assistant director, Dr. Sondag. The position of senior administrative officer remained vacant until March 1962 when Mr. E. L. Wittenborn, who had been assistant to that position for several years, was appointed to fill it with the title of assistant to the Director.

During a part of this period, a physician was attached to the general office staff with the title of medical administrative assistant. The three persons who filled that position were:

1. Dr. Allan J. McLaughlin, April 15, 1942-September 30, 1943. He was a retired officer of the U. S. Public Health Service and former State Health Officer of Massachusetts.
2. Dr. Leslie W. Knott, November 15, 1945-November 30, 1947. He was an officer of the U. S. Public Health Service on leave to fill the position and had been on loan with the Department for the three preceding years, assigned to the Division of Venereal Diseases.
3. Dr. Henrietta Herbolzheimer, June 1, 1948-November 1950. She had been trained by the Department at the Johns Hopkins School of Public Health and had previously been chief of the Division of Maternal and Child Hygiene.

A bureau of accounting was established in the general office on July 1, 1941, and Robert T. Malone, an experienced auditor, was appointed as its head, a position he still held at the end of 1962.

At the time of the reorganization in August 1950, the divisions of health education, dentistry, nursing, statistics and hotel and lodging house inspection were converted into bureaus and made, along with a newly created bureau of administration, units in the division of General Administration. The senior administrative officer, with the title of deputy director, was in immediate charge of this new division.

DIVISION OF PUBLIC HEALTH DENTISTRY

A program for the improvement of dental health was first undertaken by the Department in 1926 with funds subscribed by the Illinois and Chicago Dental Societies and the Illinois Tuberculosis Association. The next year, and thereafter, funds for the activity were appropriated of Maternal and Child Hygiene until November 1, 1935, when the Division of Dental Health Education was created. Up until 1942 the dental health program was described as "purely educational", Staff dentists,

and others recruited for temporary duty, examined the teeth of large numbers of children, but only as an appraisal and in the hope that parents would see to it that the defects so discovered would be corrected. In 1942 the practice of paying for remedial work of pre-school age children from underprivileged families was started and the name of the division was changed to Division of Public Health Dentistry. This practice, administered both directly and through local health departments, was expanded, as time went on, to include older children and appears to have become a permanent feature of local health departments.

In 1948, the Division started the practice of making x-ray surveys of the teeth of school children. This grew into a major activity until terminated in 1960.

Since 1949 the Division has devoted much attention to promoting the topical application of fluorine to the teeth of children and to the fluoridation of public water supplies, described more fully in another chapter. Considerable success has resulted from efforts to establish and improve dental health programs in local health departments. Training dentists for duty in public health departments and practicing dentists for specialization in dentistry for children has been an important activity of the Division. It has also done a considerable amount of research.

In 1935, when the Division was created, the staff consisted of two dentists and a clerk. Thereafter the personnel fluctuated up and down, falling to zero, except for one clerk, on September 30, 1945. Dr. Leslie W. Knott, the medical administrative assistant in the general office, handled the affairs of the Division, which consisted largely of subsidy payments for maintaining dental programs in local health departments, from that date until December 31, 1946. On January 1, 1947, the appointment of a new chief of the Division, Dr. John E. Chrietzberg, became effective. The personnel strength was soon rebuilt by returnees from military leave and recruitment until it became stabilized at about 15, including from five to seven specially trained dentists at any given time.

On August 1, 1950, the Division was absorbed as a bureau in the Division of General Administration and then, in 1951, reverted again to division status. The several men who filled the position of chief of the Division of Dental Health, the title used since 1951, are:

- Charles F. Deatherage, D.D.S., M.P.H., November 1, 1935.
March 31, 1943
- Mareland Emerson, D.D.S., M.P.H., April 1, 1943- April 25,
1944
- Charles F. Deatherage, D.D.S., M.P.H., May 1, 1944-September
30, 1945 (part time)
- Leslie W. Knott, M.D., M.P.H., Acting, October 1, 1945-
December 31, 1946

- John E. Chrietzberg, D.D.S., M.P.H., January 1, 1947-January 28, 1953
 John E. Zur, D.D.S., M.P.H., January 29, 1953- February 28, 1955
 Orvis S. Hoag, D.D.S., M.P.H., March 1, 1955-February 28, 1957
 John E. Zur, D.D.S., M.P.H. (after military leave), March 1, 1957-December 21, 1961
 Orvis S. Hoag, D.D.S., M.P.H., Acting, January 1, 1962-July 31, 1962
 W. J. Greek, D.D.S., M.P.H., August 1, 1962.

DIVISION OF HOSPITALS AND CHRONIC ILLNESS

This Division was created in 1950 by consolidating into one operating unit the personnel and activities which previously made up two divisions, those concerned with hospitals and nursing homes and with chronic diseases (cancer and heart). These were large enterprises, described in another chapter, and destined to increase substantially in magnitude and importance. Nursing homes and homes for the aged, which along with hospitals were subject to licensure by the Division, presented a complicated problem and at the same time an unusual opportunity for the public health profession. They provided a considerable captive population, as it were, whose pressing needs ranged from creature comforts to rehabilitation. Here was a potential opportunity to employ to the utmost the best that scientific knowledge and professional skill had to offer in dealing with chronic ailments. Because of economic and political ramifications, the licensing of these homes, with an eye on conformity with minimum standards as clearly defined by law, is perhaps the most sensitive operation in the Department of Public Health.

Hospitals, on the other hand, have become so well standardized, that the construction and licensing requirements of the Department, which are strongly supported by the medical, hospital and nurses organizations, are implemented with relatively little difficulty although strict and exacting.

Money available to the Department for combatting chronic ailments, mostly from Federal grants, has been administered by this Division. Prophylactic drugs for preventing the recurrence of rheumatic fever have been distributed since 1957 to patients registered by physicians as needy in this respect. Local programs for the control of cancer and for rehabilitating the chronically disabled have been subsidized in recent years by the Division.

All of these functions are described elsewhere in this narrative, as is also a venture in the operation of three clinics in Chicago for the treatment of narcotic addicts.

At the end of 1961 the Division had a staff of 31, including four administrators, five public health nurses, one engineer, two statisticians, three architectural draftsmen, a lawyer and 15 clerks. Much of the

field work of the Division is done by the Department's regional offices and full time local health departments.

The three people who have served as chief of the Division are:

Dr. G. Howard Gowen, 1950-1957

Dr. Ruth E. Church, 1957-1961

Dr. Roger F. Sondag, 1962-

DIVISION OF LABORATORIES

Originally established in 1904, the Division of Laboratories in 1927 was made up of two sections, diagnostic and research. At that time there was also in the Division of Sanitary Engineering a laboratory section where samples of water and sewage were tested. These facilities were transferred to the Division of Laboratories in August 1950, at the time of the general reorganization, and thereafter all laboratory functions of the Department have been consolidated in the Division of Laboratories. The persons who have filled the position of chief of laboratories since 1927 are:

Thomas G. Hull, Ph.D., January 19, 1920-March 31, 1930

Lloyd Arnold, M.D., (Acting) April 1-August 31, 1930

Howard J. Shaughnessy, Ph.D., September 1, 1930-July 15, 1937

Herbert E. McDaniels, Ph.D., (Acting) July 16, 1937-July 31, 1938

Howard J. Shaughnessy, Ph.D., August 1, 1938-

In 1927 the laboratories, including those of Sanitary Engineering, had a full-time staff of 27, of whom 16 were technically trained, and the Division operated full-duty laboratories in Springfield, Carbondale and Chicago. At the beginning of 1962, there were 195 full-time employees, of whom 93 were technically trained and full-duty branches had been established at Urbana (1933), East St. Louis (1941) and Rock Island (1951), making six in all at different locations. During the intervening years, the laboratory services of the Department were greatly expanded at times by subsidizing local laboratories to perform tests relating to diphtheria, pneumonia and the venereal diseases. That practice was discontinued as the need diminished with the changing character of public health problems.

At the beginning of the period under review, the laboratory services were limited to doing diagnostic tests and research, with some effort spent toward improving the quality of work done by local laboratories. At the end of the period, diagnostic service and research were still major activities while the production of biologics and the evaluation of local laboratories had become so. Interest in the latter was stepped up immensely by the legal provision, which became effective in 1939, that laboratory tests required by the premarital and prenatal health examination laws, would be valid only when done in laboratories approved by the State Department of Public Health. The Division of Laboratories has done an impressive volume of research, much of it terminating in practical application, some of it, such as a method

of treating wounds inflicted by rabid animals, world-wide in scope. The Division has kept fully abreast of scientific developments and has added virological and toxicological services to its facilities. The character of the services provided by the Division of Laboratories in 1962 is reflected by the titles of the bureaus in its organizational structure. These, with the name of the chief of each, are:

- Biologic Products, John Neal, Ph.C.
- Diagnostic Services, George F. Forster, Ph.D.
- Laboratory Evaluation, Herbert E. McDaniels, Ph.D.
- Sanitary Bacteriology, J. C. McCaffrey, M.S., M.P.H.
- Toxicology, Robert V. Blanke, Ph.D.
- Virus Diseases and Research, Richard Morrissey, M.P.H.

In 1962 the headquarters laboratory was located at 1800 West Fillmore Street, Chicago, in a building owned by the Department, considerably short of ideal for the purpose but serviceable. The Carbondale laboratory is in a building owned by the Department and constructed for that purpose by W.P.A., good but inadequate. The sanitary bacteriology labortory was in the attic of the State House in Springfield. All the others, including the principal laboratory in Springfield, were housed in rented quarters.

DIVISION OF LOCAL HEALTH SERVICES

This Division was created on July 1, 1940, and assigned the responsibility of managing the 21 field offices (district health units) of the Department which had been previously a function of the Division of Communicable Diseases. The district units, each with a minimum staff of a doctor, a nurse, an engineer and a clerk, had sprung up quickly, as an outgrowth of Federal grants, and provided local health services in all areas of the state not served by full time local health departments.

Beginning in 1943, after the enactment of the county health department law, the Division of Local Health Services was assigned the responsibility of promoting the establishment and improvement of full-time local health departments and of maintaining administrative relations' with them. As time went on and the number of full-time local health departments increased apace, the character of the services rendered by the Department changed from direct to advisory and consultive and the district units gave way to regional offices, five in number and with larger staffs. This process was completed on August 1, 1951. Since that date the field services of the Department, mostly advisory and consultive, have been performed through the five regional offices.

Subsequent to 1950, certain phases of the state's civil defense program and the operation of the State-wide Public Health Committee were assigned to this Division.

Those who have filled the position of chief of the Division of Local Health Services, all with postgraduate degrees from schools of public health, are as follows:

Dr. Hugo Hullerman, July 1, 1940-June 30, 1942
Dr. Richard Boyd, July 1, 1942-May 31, 1948
Dr. Charles F. Sutton, June 1, 1948.

In 1962, the five regional offices maintained by the Division, and the officer in charge of each, were:

Aurora, Allan Filek, M.D., M.S.P.H.
Champaign, Huston J. Banton, M.D., M.P.H.
Rock Island, Jackson P. Birge, M.D., M.P.H.
Springfield, W. M. Talbert, M.D., M.S.P.H.
Carbondale, Elvin L. Sederlin, M.D.

The headquarters office of the Division was in the State Office Building in Springfield.

DIVISION OF MILK CONTROL

The sanitary quality of any milk offered for sale on the open market in Illinois first became a legal responsibility of the Department of Public Health in 1925 when a law was enacted which authorized the Department to set up and enforce minimum standards for milk pasteurization plants. At that time there were about 350 such plants in operation in the state. Later the number increased to approximately 500 and subsequently declined, through the consolidation of dealer outlets, to 180 within the state in 1962 and 50 outside which did business in Illinois.

The original law was amended and rewritten several times, because of technological and other changes, until in 1955 a rewritten version, enacted in that year, provided, among other things, that after June 30, 1957, only pasteurized milk could be offered for sale on the retail market of Illinois. Another law enacted the same year, which likewise had evolved from previous statutes on the same subject, required producers of milk for the general market in Illinois to meet Grade A standards as prescribed by the Department of Public Health. This placed some 2600 dairy farms under the direct, and some 12,000 others under indirect supervision of the Division of Sanitary Engineering, to which the milk control activity had been assigned. Thus by 1955, supervision of the sanitary quality of milk had become a substantial operation.

In bringing about compliance with the regulations, the milk control unit has resorted, over the years, to numerous formal hearings, many informal hearings and a great deal of instructional work among milk dealers, milk producers, the operators of pasteurization plants and the personnel of local health departments to which much of the milk control work is entrusted. Technological advancements have made of milk production and distribution a highly technical business which is

intensely competitive; supervision over it, with respect to sanitation, requires highly trained personnel. It is noteworthy to mention that no outbreak of illness has been traced to any milk supply over which the Department of Public Health has exercised supervision.

As a means of improving functional operation, the veterinary and milk control work of the Department was consolidated in July 1955 and late in 1956, the Division of Milk Control and Veterinary Public Health was created. LeRoy R. Davenport, D.V.M., M.P.H., was placed in charge and a committee, representing all phases of the dairy industry, was appointed by the Director of Public Health to aid the new division. Dr. Davenport continued in the position until his death in 1962. On October 26, 1962, the name of the division was changed to the Division of Milk Control and Enos G. Huffer, who had been the Department's chief milk sanitarian for many years, was appointed chief.

On the Department's payroll in 1962 were 16 milk sanitarians, of whom 13 were assigned to the regional offices. The headquarters office of the Division was in the State Office Building in Springfield and had a clerical staff of four.

DIVISION OF PREVENTIVE MEDICINE

This Division was created on August 1, 1950, by combining therein the personnel and functions of five divisions which prior to that date had operated as separate administrative units. These were the divisions of (1) communicable diseases, (2) industrial hygiene, (3) maternal and child hygiene, (4) tuberculosis and (5) venereal diseases. The new Division of Preventive Medicine was organized into four bureaus, namely, (1) epidemiology, (2) industrial hygiene, (3) maternal and child health and (4) tuberculosis. The bureau of industrial hygiene was abolished in 1951 by legislative action, the result of a recommendation by the Commission to Study State Government on the grounds of duplication of functions reposed by law in the Department. Then, in 1952, the bureau of tuberculosis reverted to division status. Subsequently, reflecting developmental changes as to activities and personnel, the internal organization of the Division of Preventive Medicine fluctuated in strength and character. A bureau of school health, for example, was established in May 1955 and was continued as such in 1961 because of personnel shortage. In 1955 the bureau of epidemiology was split into the bureau of communicable disease control, with Dr. Ruth Church in charge, and the bureau of venereal disease control, with Dr. Norman J. Rose in charge. Then, in 1957, these two were again united into a recreational bureau of epidemiology under Dr. Rose. A bureau of hazardous substances and poison control was created on December 1, 1959. Thus in 1962, the Division organization consisted of three bureaus:

Epidemiology
Hazardous Substances and Poison Control
Maternal and Child Hygiene.

Dr. Norman J. Rose doubled as chief of the first two named and Dr. Donaldson F. Rawlings, also chief of the Division, was in charge of the third.

The Division of Preventive Medicine operates a broad program which embraces all phases of maternal and child health and all phases of communicable disease control except tuberculosis. Much of its work is accomplished indirectly through official and non-official agencies. Specialized care of prematurely born babies, for instance, which in recent years has been extended annually to about 1500 babies at a cost to the state of about \$375,000 per year, is accomplished through local hospitals and physicians, with the aid of local health departments, the Division provided only ambulance transportation in the Springfield area as a direct service. A project in the management of the mentally retarded is implemented largely through subsidizing a clinic at Children's Memorial Hospital in Chicago and the consultive services of a public health social worker.

Activities concerning the control of communicable diseases include:

1. The preparation, revision and enforcement of rules and regulations.
2. Collection, analysis and appraisal of case reports.
3. Initiation and direction of epidemiological studies and surveys.
4. Distribution of preventive, diagnostic and therapeutic biologics and drugs.

Particular attention is paid to those infectious diseases for which no preventive biologic is available, such as infectious hepatitis, encephalitis, certain forms of infectious meningitis, German measles when pregnant women are concerned, and infectious outbreaks of any kind in hospital nurseries and maternity departments. A standing committee of Department personnel, known as the Team on Neonatal and Hospital Infections, is maintained on a constant "alert" basis for quick on-the-spot action when outbreaks occur in hospitals.

The poison control project is operated through the voluntary co-operation of some 80 hospitals, widely distributed, which maintain around-the-clock information bureaus and emergency treatment stations for the victims of accidental poisoning.

Several committees of specialists, appointed by the Director, including one on poliomyelitis, another on the revision of rules and regulations concerning communicable diseases, and one on hazardous substances, have rendered valuable assistance to the Division, which also has the benefit of assistance from various standing committees of the Illinois State Medical Society.

Most of the activities of this Division are described in some detail elsewhere in this narrative.

At the end of 1961 the Division had a staff of 45 full-time employees, including three physicians, two public health nurses, one

nutritionist, one public health social worker, one investigator, one ambulance driver and 36 clerical workers. The budget of the Division for the biennium ending June 30, 1963 was \$2,556,995, of which \$1,386,215 was from Federal grants. The three persons who have served as chief of the Division of Preventive Medicine are:

- Dr. Leonard M. Schuman, 1950-1951
- Dr. Clifton Hall, Acting, 1952
- Dr. Leonard M. Schuman, 1953-1954
- Dr. Donaldson F. Rawlings, 1955-

Dr. Hall filled the position of chief for about 16 months while Dr. Schuman was in Korea on a mission to study frostbite for the Defense Department. This Division is housed in the State Office Building in Springfield.

DIVISION OF SANITARY ENGINEERING

Originally established by legislative action in 1915, this Division in 1927 had 23 full-time employees, of whom 14 were technically trained. At that time it maintained laboratories for testing samples of water and sewage, and had charge of the milk control program. At the beginning of 1962 there were 77 full-time employees, of whom 59 were technically trained, including 36 engineers and none of whom were assigned to laboratory or milk control duties. This increase in personnel is a measure of the growth of the Division in both strength and importance.

The prevention and elimination of contamination of water supplies has been the dominant concern of the Division of Sanitary Engineering from the outset. As the population multiplied and industrialization increased, along with the advancement of technology, this became vastly more complicated and necessary than at the beginning. It has involved technical supervision over the construction and operation of public water supply and sewage disposal systems and swimming pools, and the regulation of industrial waste disposal facilities; and it has required a great deal of epidemiological investigation, especially at the scenes of epidemic outbreaks attributable to contaminated water. With the primary duty of protecting water supplies, public and private, the Sanitary Engineering personnel has been the mainstay of the Department in providing health protection in the path of disasters brought on by numerous floods and tornados.

The Division engages extensively in work of abating stream pollution both within the state and outside, in cooperation with the Ohio River Valley Water Sanitation Commission, of which Illinois is a member. It regulates, through licensure, the sanitation and safety features of trailer coach parks and of migrant labor camps. It administers the far-reaching Atomic Energy Act which involves waste disposal, exposure to radiation and atmospheric pollution. In short, the Divi-

sion of Sanitary Engineering is engaged in a broad program of environmental sanitation which is basic to human welfare.

The chief engineers who have guided this Division since 1927 are:

Harry F. Ferguson, May 15, 1920-January 16, 1935 (Deceased)
 Clarence W. Klassen, January 17, 1935-January 31, 1943 (military leave)
 William J. Downer, February 1, 1943-October 31, 1945
 Clarence W. Klassen, November 1, 1945-

The organizational structure of the Division in 1962 consisted of five bureaus. The title of each and the man in charge were as follows:

General Sanitation, H. A. Spafford, B.E.
 Public Water Supplies, William J. Downer, B.S.
 Radiological Health and Air Pollution Control, C. W. Klassen, B.S.
 Special Services, Eugene S. Clark, A.B.
 Stream Pollution, R. S. Nelle, B.S., B. E.

The Division occupied headquarters space in the State Office Building in Springfield and maintained an office in Chicago.

DIVISION OF TUBERCULOSIS

Carried on the organizational chart as a separate administrative unit of the Department of Public Health from 1917 onward, this Division first became more than a paper agency on February 1, 1942, with the appointment of Dr. Edward K. Steinkopff as the full-time chief of the Division. His staff at first consisted of one stenographer and another one had been added by the end of the second year.

After this belated beginning, the Department's anti-tuberculosis work, described at some length in another chapter of this narrative, grew rapidly until by 1961, and for several years before, more than 40 per cent of the total appropriation of state money to the Department of Public Health was earmarked specifically for tuberculosis. For the biennium beginning July 1, 1961, the state appropriation to the Department for tuberculosis work was \$8,374,962, the grand total of state money appropriated to the Department for all purposes being \$19,713,579.

The responsibilities of the Division of Tuberculosis Control include the management of the Chicago and Mt. Vernon state tuberculosis sanatoria with a combined personnel of about 425 (including 15 part time); the disbursement of tuberculosis subsidy funds; the operation of a state-wide case finding program; and general supervision over public tuberculosis sanatoria.

Dr. Clifton Hall was made chief of the Division on January 15, 1945, relieving Dr. A. W. Burke who had been acting chief following the resignation of Dr. Steinkopff on April 11, 1944, and was still in the position at the end of 1962. This organization unit was made a

bureau in 1950 but reverted to division status in 1952. It is housed in the State Office Building in Springfield.

The organizational units described in outline heretofore in this chapter were all functioning as divisions of the Department of Public Health in 1962. Those described in like manner hereafter in this chapter, had, prior to 1962, ceased to function as divisions. Some retained their identities but as bureaus rather than divisions. Others were fused with other similar units into a common bureau. Some were abolished outright.

DIVISION OF CHILD HYGIENE AND PUBLIC HEALTH NURSING (*Became the bureau of maternal and child health in 1950*)

This Division was already well established in 1927. At that time it had begun to broaden the scope of its activities and afterwards was responsible for initiating and developing more types of programs than any other administrative unit in the Department. Among them were projects in maternal care; school health, including teacher training; official public health nursing services; specialized training of physicians and nurses; specialized care of prematurely born babies; medical examination of pre-school children; immunization campaigns; dietary and nutritional education, including a project in breast-feeding of infants; mental health, including mental retardation; sex education; the administration of the emergency maternal and infant care program and that of hospital licensing and construction. The growth of some of these activities led to the creation of three other divisions, those concerned with dentistry, hospitals and nursing. In August 1941 its title was changed to Division of Maternal and Child Hygiene.

All of the Federal grants to the Department from the U. S. Children's Bureau have been administered through this Division or the bureau into which it was converted in 1950. These ranged upward from the initial grant of \$86,232.50 for the fiscal year ended June 30, 1937, to \$706,461 for the year ended June 30, 1963, except that the grant was nearly two and one-half million for the year ended June 30, 1945, and well over one million for the preceding year, made so by the requirements of the wartime EMIC project.

Because of the character of its activities, this Division came into operating relationship with a wider range of other agencies, official and voluntary, than other administrative units of the Department, including the medical and dental societies; educational institutions and agencies, especially the Medical College of the University of Illinois and the several teachers colleges; women's clubs; parent-teacher associations and others. Active advisory committees, representing the interests implicit in the various activities, have been maintained throughout the existence of this Division and the subsequent bureau.

At the time of the general reorganization of the Department in 1950, this Division became the bureau of maternal and child health

in the Division of Preventive Medicine. Those who held the position of chief of the Division are:

- Dr. Grace S. Wrightman, October 5, 1925-November 17, 1941
- Dr. Fred Adair, March 1, 1942-May 31, 1943
- Dr. Hugo Hullerman, June 25, 1943-June 30, 1944
- Dr. Henrietta Herbolzheimer, July 1, 1944-September 4, 1947
- Dr. Ruth Dunham, September 5, 1947-June 30, 1948
- Dr. Donaldson F. Rawlings, August 1, 1948-

DIVISION OF CANCER CONTROL (*Became a bureau in 1950*)

Established by law in 1939, the Division of Cancer Control was activated on April 1, 1940. From the outset its work, described in another chapter of this narrative, was limited largely to the establishment and general supervision over local subsidized cancer diagnostic clinics. It was absorbed as a bureau, on August 1, 1950, in the Division of Hospitals and Chronic Illness. The two men who filled the position of chief were:

- Dr. Raymond V. Brokaw, April 1, 1940-February 28, 1946
- Dr. G. Howard Gowen, March 1, 1946-July 31, 1950

DIVISION OF COMMUNICABLE DISEASES (*Was fused into the bureau of epidemiology in 1950*)

Created in 1917, this Division from the outset was the Department's nerve center for dealing directly with transmissible diseases with two exceptions, tuberculosis and venereal infections, which are referred to elsewhere. The Division of Communicable Diseases was responsible for the preparation and enforcement of rules and regulations concerned with transmissible diseases; the collection, compilations and interpretation of morbidity statistics; epidemiological investigations; distribution of biologics; and the initiation of immunization campaigns. It had administrative supervision over the Department's district health units until July 1, 1940, and over the venereal disease control activities from March 1933 until December 1940, when new divisions were created to handle those two functions. From November 1938 until the mid-forties it conducted a special program against pneumonia which involved a state-wide network of laboratory testing stations and the distribution of type specific pneumonia serum. For several years it operated a small program on industrial hygiene.

For all of these reasons and because of military requirements after the outbreak of World War II, the personnel strength of the Division varied widely during the period under review. In 1927 the staff included 15 physicians, 12 of whom were district health superintendents, and clerical workers in proportion. In 1939, when the Division reached peak strength, the staff included 24 physicians, 19 of whom were district health superintendents. Each of the 19 districts also had a nurse, an engineer and a clerk. Thereafter it declined in strength until in 1950 it was absorbed as the bureau of epidemiology in the newly created

Division of Preventive Medicine. The persons who served as chief of the Division of Communicable Diseases were:

Dr. John J. McShane, August 1, 1917-December 14, 1943
 (deceased)

Dr. Jerome J. Sievers, January 1, 1944-June 30, 1949

Dr. Leonard M. Schuman, July 1, 1949-July 31, 1950

DIVISION OF HOSPITAL CONSTRUCTION AND SERVICES (*Became the bureau of hospitals in 1953*)

The hospital construction program, described at some length in another chapter, was started by the Division of Maternal and Child Hygiene in 1945. Within two years it had become a major activity of the Department and on September 5, 1947, by executive order of the Director, the Division of Hospital Construction and Services was established. Dr. Henrietta Herbolzheimer, who had been in charge of the project from its inception, was made chief. She at once left on a year's education leave, however, and upon her return was given another assignment.

As recounted elsewhere in this narrative, the Division, which handled both the mammoth construction program, the licensing of hospitals and related services, was absorbed in 1950 as a bureau in the Division of Hospitals and Chronic Illness. At the time of its creation, the Division had a staff of 25, of whom 10 were professionally or technically trained. The personnel strength has changed but little since that time. Of the three men who have served as chief of the Division (and bureau), the first was a sanitary engineer, the second, an architectural engineer and the third, a hospital administrator with a post-graduate degree of M.P.H. Their names and tenures are:

George Hendrix, September 18, 1947-June 30, 1953

Jerome V. Ray, July 1, 1953-July 31, 1960

George A. Lindsley, August 1, 1960-

DIVISION OF HOTEL AND LODGING HOUSE INSPECTION (*Abolished in 1953*)

Designed to function only in Chicago at a time when a flood tide of immigration greatly overtaxed housing facilities, creating thereby fertile breeding grounds for contagious diseases, the Division of Hotel and Lodging House Inspection was created by law in 1901, on recommendation of the State Board of Health. Through a corps of inspectors it maintained surveillance over lodging facilities, particularly rooming houses, enforcing minimum standards of air space and sanitation, and thus served a very useful purpose for many years. As municipal building regulations developed and the growth rate of the city tapered off, with corresponding improvement in the techniques of controlling contagious diseases on the one hand, and the ability of the city government to handle its own affairs on the other, the inspection by the state of

lodging houses in Chicago contributed less and less benefit to the public health of Illinois.

Although one State Director of Public Health after another recommended, from time to time, that the Division of Hotel and Lodging House Inspection be abolished as a state function, it continued to operate until 1953 when it was abolished by legislation, the result of a recommendation by the Commission to Study State Government, created in 1949. In the meantime, the Division was absorbed in 1950 as a bureau in the Division of Preventive Medicine, created at that time. During the last decade or so of its existence, the Division maintained an inspector in Peoria, as that city had come to exceed 100,000 population, the legal qualifying size for this activity.

During its later years, the Division maintained a staff of about 15 inspectors and the last appropriation made specifically for its operation (1949-1951 biennium) was \$129,291. The man in charge of the Division was classed as a state officer, appointive by the Governor, with the title of Superintendent of Lodging House Inspection and appointees to the position from 1927 to 1953 were as follows:

Arch Lewis, October 1, 1923-March 19, 1928
John Ranson, March 20, 1928-January 15, 1930
William F. Behrens, January 16, 1930-August 15, 1931
Charles L. Gerdts, August 15, 1931-July 18, 1933
Courtney Scobell, July 18, 1933-June 28, 1934 (deceased)
William P. Haberkorn, July 3, 1934-March 31, 1936
Thomas J. O'Grady, May 27, 1936-March 5, 1937 (deceased)
Michael J. Costello, November 1, 1937-April 23, 1941
Bernard S. Black, July 1, 1941-January 31, 1945
Felix F. Kucharski, February 1, 1945-March 31, 1949
Edward A. Gauna, April 1, 1949-June 30, 1953

DIVISION OF INDUSTRIAL HYGIENE (*Abolished in 1951*)

The Division of Industrial Hygiene was created by executive order of the Director on July 1, 1936. Prior to that time, the Department had paid some attention to the special health needs of workers in industry. Case reports of occupational diseases were collected by the Division of Communicable Diseases and on September 4, 1928, Dr. C. S. Beach was appointed in that division as an industrial hygienist. He promoted interest in preventive medicine by visits to industrial plants and in November 1931, started a clinic at Chicago, open on Saturdays only, for the free diagnosis of occupational diseases. This type of work, except for the clinical, was expanded and extended after the Division was organized with an original staff consisting of two physicians, two engineers, two chemists, a laboratory technician and two clerks. By June 30, 1948, the personnel reached peak strength with 24 employees, of whom three were physicians (one part-time), nine engineers, four chemists, two nurses, one engineering aide and five clerks.

Excellent relations prevailed from the outset between both management and labor and the Division which devoted its efforts to fact-finding as to detrimental practices and conditions, and to recommendations based thereon for improvement. A very active voluntary advisory committee, appointed by the Director and made up of leading industrialists and labor representatives, supported the Division in an aggressive program. Although the legal authority for protecting the health of industrial workers was vested in the Department of Labor, which concerned itself in this respect chiefly with factory inspection and the enforcement of regulations relating thereto, no conflict arose between that Department and the Division, as the Department of Public Health had entered the field only after an agreeable understanding with the Director of Labor.

In 1951, however, on recommendation of the Commission to Study State Government, the industrial hygiene program was abolished by legislative action on the grounds of duplication and that the Department of Public Health had no legal authority to operate it. The men who filled the position of chief were:

Dr. Milton Kronenberg, July 1, 1936-September 30, 1944
 Dr. Bruce M. Brown, October 1, 1944-December 31, 1944
 Kenneth Morse, Industrial Engineer, January 1, 1945-March 8, 1946
 Dr. Robert F. Shrontz, March 9, 1946-June 3, 1946
 Kenneth Morse, June 4, 1946-June 30, 1951

The Division was based in Chicago throughout its existence.

DIVISION OF PUBLIC HEALTH INSTRUCTION (*Became a bureau in 1950*)

Prior to 1927 and for somewhat more than a decade thereafter, this Division was quartered with and operated as a part of the General Office. Functionally it was the public relations and informational arm of the Department and thus was drawn into close contact with the Director and with general administrative affairs. Its activities were designed to attract public attention to the program and objectives of the Department and to build up confidence in preventive medicine. To this end aggressive advantage was taken of all publicity media. Material suitable for newspapers and the radio was prepared systematically and widely utilized. A single-sheet weekly bulletin based on prevailing health conditions was circulated among health workers of the state. Elaborate exhibits were displayed and demonstrations conducted on all appropriate occasions, particularly at the State and other fairs, including the 1933 World's Fair in Chicago. A house organ, *Illinois Health News*, was published and widely distributed monthly until 1929 and twice monthly thereafter for several years under the title of *Illinois Health Messenger*. Special events such as an annual conference for public health workers and an annual health promotion week on a state-wide basis, and localized projects such as town meetings were arranged and carried through to termination. Special literature

of the Department was prepared or edited. A motion picture loan library was developed.

This type of work required only a small staff which consisted in 1927 of only the Division chief, two stenographers and a messenger and was increased prior to 1940 by the addition of only a writer and an exhibit specialist. After that date (1940) the emphasis of the Division's work began to shift and in 1945 its title was changed to the Division of Health Education and its office moved to rented space in downtown Springfield. Health education grew rapidly into a professional specialty whose emphasis was on community organization. The Division became active in the recruitment of candidates for special postgraduate training in health education and in promoting the local employment of professional health educators. The publication of the *Illinois Health Messenger* was continued, but on a monthly schedule; a new magazine for health educators, *H-EDlines*, was started; the motion picture loan library was not only expanded, having in 1962 some 3000 titles, but was converted into a central booking agency from which health education films generally available in Illinois from whatever organization could be borrowed rent-free; a public health library of considerable size was developed; material for newspapers was prepared only sporadically; radio and television were seldom used; exhibits were prepared principally for use on loan by local agencies. The main effort of the Division during these more recent years has been directed, however, toward promoting health education programs in full-time local health departments to which the tools of this specialty were made available.

The Division was instrumental in the organization in 1952 of the Illinois Society of Public Health Educators and has since been a strong supporter thereof. In 1962 this Society had an active membership of 87, all of whom are professional health educators. This contrasts with the situation in 1940 when the number of professionally trained health educators employed in Illinois probably did not exceed half a dozen.

The growth of full-time local health departments, the great increase of public sophistication about health matters and the consolidation of public school districts are three important factors which influenced the shift of emphasis in the character and content of the Division's program.

Since 1950 this organizational unit has operated as a bureau in the Division of General Administration. In 1962 its personnel consisted of two professional health educators; a writer, two illustrators, three audio-visual technicians, a photographer, a maintenance worker and a clerical staff of eight.

The names of the people who have served as chief of this unit since 1927 are:

- B. K. Richardson, November 5, 1920-December 31, 1940
- Leona East, February 1, 1941-August 31, 1944
- Ruth Sumner, September 1, 1944-May 31, 1945
- Leona East, June 1, 1945-November 30, 1945
- Jean Christopher, December 1, 1945-July 6, 1946
- Margaret Cowdin, October 1, 1946-September 30, 1949
- E. L. Wittenborn, October 1, 1949-October 31, 1950
- Margaret Cowdin, November 1, 1950-August 31, 1953
- Howard E. Hough, September 1, 1953-January 25, 1960
- Forrest Nelson (Acting), January 26, 1960-July 15, 1961
- Lynford L. Keyes, July 16, 1961-

Since October 1955 this bureau has been housed in the State Office Building, occupying a part of the space assigned to the Department of Public Health.

DIVISION OF PUBLIC HEALTH NURSING (*Became a bureau in 1950*)

Created on August 27, 1941, by executive order of the Director, the Division of Public Health Nursing was established as a separate administrative unit to promote functional efficiency. Previously the nursing services of the Department had been an important and expanding activity of the Division of Child Hygiene and Public Health Nursing. At the time the Division was created there were 93 nurses under the supervision of the chief nurse, nine of whom were on her immediate staff. Of the others, 21 were on duty in district offices, 17 in venereal disease clinics, 15 in counties which paid one-half of their salaries, 14 in a field training unit, eight in maternity demonstration projects and the remainder on special assignments. Since that time the number of public health nurses employed by the Department of Public Health has varied considerably with changing circumstances but the trend has been downward until at the beginning of 1962 only 30 were on the payroll. (This does not include the nurses on duty in the Chicago and Mt. Vernon state tuberculosis sanatoria and the first aid stations as they are not qualified public health nurses.) Only four of these 30 were on the immediate staff of the bureau of nursing, the others being attached to various other bureaus of the Department.

A change in Department policy which encouraged the employment of public health nurses by local agencies to do the local jobs accounted for the decline in the number employed by the Department. This change of policy resulted primarily from the development of full-time local health departments. The number of public health nurses employed in Illinois in 1950 was 1220, of whom 23 were part-time. In 1962 the number was 1694, of whom 124 were part-time. Employment in the schools accounted for most of the increase.

The bureau of nursing concerns itself with the entire field of the nursing profession with emphasis on the public health phases thereof. Its aim is to improve the basic training of both registered and practical nurses and the graduate training in the specialties, particularly public health. In accomplishing this it works with organizations of nurses, the training institutions and other agencies.

The bureau has recruited hundreds of candidates for whom specialized training in suitable institutions was arranged at the expense of the Department. It also has recruited qualified personnel to fill public health nursing positions in Illinois and has promoted their employment at both state and local levels. It has conducted work shops for on-the-job instruction of public health nurses and has done a great deal of instructional work in nursing homes with an eye on both the comfort and rehabilitation of patients. It has exercised technical supervision over the public health nurses employed by the Department and provided consultive service to local public health nurses. Through the planning of programs, the encouragement of training at all levels, and the initiation of movements for improved performance standards and rewards therefor, this organizational unit of the Department of Public Health, which until August 1950 was a division and afterward a bureau in the Division of General Administration, has made a major contribution to the improvement and expansion of public health nursing in Illinois. In turn, the public health nurses have made a major contribution to the remarkable improvement of health conditions of the state.

Miss Maude B. Carson was the chief nurse in the Department from July 1, 1938 until her retirement on August 31, 1956. Since then Mrs. Pearl Ahrenkiel, who was still on the job at the end of 1962, has held that position.

DIVISION OF VENEREAL DISEASE CONTROL (*Fused into the bureau of epidemiology in 1950*)

The organizational unit of the Department responsible for combatting the venereal diseases was classed as a division from the time of its creation in 1918 until March 1933, when, as an economy measure, it was made a section of the Division of Communicable Diseases. Then in December 1940, because of the great military-related interest in the venereal infections, it was again given divisional status. Subsequently, in August 1950, when the Department was reorganized and the character of venereal disease control had changed, it was combined with other activities in the bureau of epidemiology in the Division of Personal Health Service, as then titled.

From the outset this operating unit was concerned with the detection of persons infected with venereal diseases, their treatment and the elimination of sources of infection. Over the years this unit has fluctuated widely in personnel strength and in character of activi-

ties. At times it maintained a corps of investigators, subsidized and supervised numerous local clinics and distributed drugs for the treatment of venereally infected patients without restriction. After the advent of antibiotics in the mid-forties, the character of therapy changed radically and with it the character of the work of the unit, described in some detail in another chapter of this narrative.

Persons who have been in direct charge of the venereal disease control program since 1927 include the following:

- Dr. C. C. Copelan, 1921-1931
- Dr. Charles F. Harmon, 1931-1933
- Dr. Noxon Toomey, 1936-1939
- Dr. Herman M. Soloway, 1940-1944
- Dr. George G. Taylor, 1944-1946
(Dr. Taylor perished in the LaSalle fire at Chicago on June 5, 1946.)
- Dr. Charles H. Miller, Jr., 1946
- Dr. Leonard Schuman, 1947-1950

Beginning in August 1950, the venereal disease control work of the Department was consolidated with activities relating to other transmissible diseases (except tuberculosis) in the bureau of epidemiology in the newly created Division of Preventive Medicine. Dr. Norman J. Rose was made chief of the bureau at that time and still filled the position at the end of 1962.

DIVISION OF VITAL STATISTICS (*Became a bureau in 1950*)

In 1927 the work of this organizational unit was concerned almost exclusively with the implementation of the vital statistics law. This included the collection, tabulation, interpretation, publication and preservation of records of births, stillbirths and deaths, and providing certified copies thereof to qualified applicants. A staff of 26, mostly clerical, performed these activities.

During the intervening years up to 1962, new responsibilities assigned to this organizational unit included the tabulation of morbidity records, the processing of personnel performance reports, the implementation of the law concerning the necropsy duties of coroners and the registration of marriages, divorces and annulments. For these duties a staff of 96 (1961) was employed.

The vital statistics law has been amended many times and was entirely rewritten in 1915 and again in 1961, on recommendation of the State Health Officer, in order to modernize procedures and clarify accessibility of the records to the public. Socio-technological and economic changes since 1927 caused an enormous upsurge in the use of certified copies of vital records, as evidence of citizenship, age and the right to enjoy numerous benefits such as attendance at schools, insurance payments, employment, etc. This, together with an ever-increasing need for detailed statistical data, has added substantially to the workload of the unit.

Although it has taken advantage liberally of laborsaving devices (it was the first state agency to acquire the use of IBM equipment), this organizational unit of the Department has never been adequately staffed to function on a quantitatively superior level. Its housing has varied from wretched to fair. For several years it was crowded into a corridor of the Centennial Building and later occupied rented quarters constructed originally for a warehouse. In 1954 it was moved into the Archives Building, using parts of four floors in space which for the most part was designed for the storage of historical documents. There it continued to be at the end of 1962, with an overflow section crowded into the State Office Building.

Under the circumstances it is not a little astonishing that both the volume and quality of accomplishments have compared favorably with the production of similar agencies of other states in the population range of Illinois.

This organizational unit had the status of a division until 1950 when it became a bureau in the Division of General Administration. Those who have served as chief of the statistical unit since 1927 are as follows:

Sheldon L. Howard, A.B., 1917-1937
Richard Ledgerwood, Ph.D., 1938-1941
O. K. Sagen, Ph.D., 1941-1957
Clyde A. Bridger, A.B., 1957-1959
E. L. Wittenborn, B.S., M.P.H., 1959-

From 1941 through 1948, that part of the statistical work which related only to births and deaths was operated as a separate function within the unit under the supervision of Dr. Robert W. Woodruff. Upon his retirement on December 31, 1948, at age 70, compulsory at that time, the vital statistics function ceased to have an organizational distinction. As chief of the bureau of administration, Mr. Wittenborn, in 1959, assumed personal supervision over the bureau of statistics.

INTEGRATED AND ASSOCIATED AGENCIES

STATE BOARD OF PUBLIC HEALTH ADVISORS

The State Board of Public Health Advisors, created by law in 1917 when the Department of Public Health replaced the State Board of Health, and appointive by the Governor, has authority to advise the Director upon his request; to recommend, on its own initiative, policies and practices which the Director is obligated to consider; to give advice or make recommendations to the Governor and the General Assembly when so requested, or on its own initiative; to investigate the conduct of the work of the Department; and to hold meetings whenever and wherever within the state it may determine but not less frequently than quarterly. In practice, the functions and activities of the Board are largely reflections of the interests, temperament and attitudes of the Director. Members of the Boards, who serve without pay, are deeply involved in their personal affairs and tend to consider in behalf of the Department of Public Health only such matters as the Director brings to their attention. Except during the three-year tenure of Dr. Baxter as Acting Director and Director, when only one meeting was called, and that for the purpose of deciding whether or not to accept proffered Federal aid for the construction of a laboratory building at Carbondale, and for the period from 1953 to 1961, when no Board was appointed, the Board has met with considerable regularity on a quarterly basis. Directors have uniformly kept the Board apprised, through reports at meetings, of the current activities of the Department, and have sought and obtained the advice and counsel of the Board on problems of program and policy.

Throughout its existence the Board has taken a lively *responsive* interest in the Department's affairs. It often has been extremely helpful to the Director in legislative matters, in arriving at important policy decisions and as a liaison with the medical profession. Two matters more sharply debated than any others were (1) the acceptance of Federal subsidies for public health purposes and (2) any tendency of the Department to encroach on private enterprise, especially the practice of medicine. Approval by the General Assembly through legislative action settled the first-mentioned of these two problems. A sort of adjustable accommodation participated in by the Illinois State Medical Society from time to time as questions arose has prevented the second from getting out of hand.

Governor Stratton appointed no Board of Public Health Advisors during his two terms, 1953-1961. Although technically in office until

their successors were appointed and qualified, the members of the Board appointed by Governor Stevenson did not feel free to function as a Board during this period. Consequently no meeting was called except a perfunctory session on January 8, 1960, for the purpose of presenting a citation from Governor Stratton to Dr. James H. Hutton for his distinguished contributions to public health during a long-time membership on the Board.

The Board was reactivated in 1962 when Governor Otto Kerner, on April 19, appointed six persons, listed below, to membership thereon, leaving three vacancies. Responding to Dr. Yoder's leadership, the Board had met three times before the year's end, on July 13 in Springfield, and on November 5 and December 18 in Chicago, with all members present at each session. Governor Kerner appeared at the first and third of these meetings, all of which were devoted to immediate and long term plans for providing the state with comprehensive, modernized public health services. At the first meeting, the Board was thoroughly briefed by Dr. Yoder on the unmet public health needs and by the division chiefs on the detailed status of the Department's affairs. With medicine, dentistry, sanitary engineering, veterinary medicine and finance represented on the Board, the outlook seems promising that the contemporary Board is to become an important factor in bringing to bear on the larger public health problems of the state a combination of strong forces.

The law prescribes no qualifications for members of the State Board of Public Health Advisors whose terms in office, like those of Department Directors, are for two years, dating from the third Monday in January of each odd-numbered year and until their successors are appointed and qualified. In practice the members of the Board continue to serve throughout the tenure of the appointing Governor without the formality of re-appointment each two years. By law, the Board consisted of five members until 1951 when the General Assembly, acting on one of the recommendations of the Commission to Study State Government, increased the number to nine. Persons appointed to membership on the Board during the period 1927-1962, include the following:

1927, APPOINTED BY GOVERNOR SMALL

Dr. Thos. D. Doan, Elmira, *Chairman*
 Dr. Herman N. Bundesen, Chicago
 Dr. W. A. Evans, Chicago
 Mrs. E. N. Monroe, Quincy
 Dr. E. P. Sloan, Bloomington

1928 Dr. Arnold H. Kegel, Chicago, *vice* Dr. Bundesen

1929, APPIONTED BY GOVERNOR EMMERSON

Dr. Clifford U. Collins, Peoria, *Chairman*
 Dr. W. A. Evans, Chicago
 Dr. Rufus J. Coulter, Mattoon
 Dr. James H. Hutton, Chicago
 Dr. Arnold H. Kegel, Chicago

1933, APPOINTED BY GOVERNOR HORNER

Dr. Clifford U. Collins, Peoria, *Chairman*
 Dr. W. A. Evans, Chicago
 Dr. Herman N. Bundesen, Chicago
 Dr. C. D. Center, Quincy
 Dr. W. W. Hamburger

1934 Dr. Maurice Rubel, *vice* Dr. Center, deceased

1936 Dr. E. J. Doering, *vice* Dr. Hamburger, resigned
 Dr. Samuel Munson, Springfield, *vice* Dr. Bundesen,
 resigned

1941, APPOINTED BY GOVERNOR GREEN

Dr. Robert S. Berghoff, Chicago, *Chairman*
 Dr. Clifford U. Collins, Peoria
 Dr. James H. Hutton, Chicago
 Dr. R. W. McNeally, Chicago
 Dr. Walter Stevenson, Quincy

1942 Dr. G. B. Dudley, Charleston, *vice* Dr. Collins, resigned

1949, APPOINTED BY GOVERNOR STEVENSON

Dr. E. A. Piszczeck, Chicago, *Chairman*
 Dr. Everett P. Coleman, Canton
 Edison Dick, Chicago
 Dr. Lloyd Dodd, Dentist, Decatur
 Dr. James H. Hutton, Chicago
 1951 Miss Jessie F. Binford, Chicago
 Dr. Frank Jirka, Chicago
 Dr. C. O. Lane, West Frankfort
 Dr. Garn Norbury, Jacksonville
 (Membership increased to nine in 1951)

1962, APPOINTED BY GOVERNOR KERNER

Dr. E. A. Piszczeck, Forest Park, *Chairman*
 Dr. John A. D. Cooper, Chicago
 Dr. Robert G. Kesel, Dentist, Chicago
 Dr. Carl A. Brandly, Urbana
 Alex Van Praag, Decatur
 Mrs. F. W. Specht, Wheaton
 (Only six appointed)

ADVISORY BOARD OF CANCER CONTROL

Created by law in 1939, this Board, a legal entity in the Department of Public Health, consists of seven members, all appointive by the Governor for staggered terms which, except for the first appointments, are for three years each. "No less than four members of the Advisory Board of Cancer Control shall be recognized authorities in the field of cancer control, and at least four members of the Board shall be physicians" says the law, and, "In the appointment of the Advisory Board the Governor shall invite nominations from recognized medical organizations of this state." No specific duties are imposed by law on the Board except to receive and expend any voluntary contributions for cancer control. It has met irregularly over the years at the call of the Director for consideration of such matters relating

to cancer as were brought to its attention by the Director or his representative. None but physicians have been appointed to membership on the Board.

Those who have served as members of the Advisory Board of Cancer Control include the following:

Robert E. Bowen, M.D., Springfield
 James M. Christie, M.D., Champaign
 E. P. Coleman, M.D., Canton
 William M. Cooley, M.D., Peoria
 D. J. David, M.D., Chicago
 Fred P. Decker, M.D., Peoria
 Gilbert A. Edwards, M.D., Pinckneyville
 Fauntleroy Flinn, M.D., Decatur
 James P. Grier, M.D., Evanston
 Edwin F. Hirsch, M.D., Chicago
 Charles E. Leonard, M.D., Rockford
 Roswell T. Pettit, M.D., Ottawa
 Caesar Portes, M.D., Chicago
 David F. Rendleman, M.D., Carbondale
 James P. Simonds, M.D., Chicago
 James S. Templeton, M.D., Pinckneyville
 John A. Wolfer, M.D., Chicago

ADVISORY BOARD ON NECROPSY TO CORONERS

An amendment to the Civil Administrative Code in 1955 created in the Department of Public Health an Advisory Board on Necropsy Service to Coroners. This Board, the first members of which were appointed on October 29, 1956, held an organization meeting on January 18, 1957, and began at once a successful effort to bring about an amendment to the law in relation to coroners. Enacted in 1957, this amendment, among other things, made it the duty of the State Director of Public Health to appoint in each county, except Cook, on recommendation of the Advisory Board on Necropsy Service to Coroners, a physician whose duty is to perform all autopsies and medical examinations deemed necessary by the coroner, in his official capacity, in order to establish the correct cause of death, and to report thereon to the coroner and to the State Director of Public Health.

This Board, which up through 1962 was aggressive, active and devoted, prepared for publication and distribution by the Department, material for three manuals:

A MANUAL FOR CORONERS' PHYSICIANS—June 1958
 A MANUAL FOR CORONERS—March 1959
 A MANUAL FOR CORONERS' PATHOLOGISTS—August 1960

Through the initiative and work of the Board a law was enacted in 1959 which established in the Department of Public Health a toxicological laboratory.

These achievements, which characterize the work and interests of the Board, were the culmination of many years of study and effort by the Illinois State Medical Society to bring about the legal requirement of having medical judgment officially expressed in those phases of the work of coroners which involve problems and opinions.

The law specifies that the Advisory Board on Necropsy Service to Coroners shall have nine members, appointive by the Governor for staggered terms of three years each, after the first appointments. The law also specifies that three members shall be physicians of whom two shall be pathologists; three elected coroners; and three who shall be neither physicians nor coroners but who have interests and abilities in forensic medicine. Only seven of the nine authorized members were appointed by Governor Stratton at the outset. The names and year of appointment of these and others who had been appointed to membership on the Board through 1962 are as follows:

- 1956 W. Clark Davis, coroner, Grundy county, Morris
 Joseph R. Hallett, coroner, McLean county, Bloomington
 Edwin F. Hirsch, M.D., pathologist, St. Luke's Hospital,
 Chicago
 David O. Holman, M.D., pathologist, St. John's Hospital,
 Springfield
 Bernard McDevitt, attorney and professor of medical law
 at Stritch School of Medicine, Loyola University,
 Chicago
 Jacob E. Reisch, M.D., surgeon and general practitioner,
 Springfield
 Donald T. Wikoff, coroner, Champaign county, Urbana
 1957 Senator Robert R. Canfield, Rockford
 1958 Grant C. Johnson, M.D., pathologist, Memorial Hospital,
 Springfield
 1960 Phares G. Thompson, coroner, Macon county, Decatur
 Roger B. Ytterberg, Illinois Funeral Directors Association,
 Springfield
 1962 Kevin Burke, attorney, Springfield

ADVISORY HOSPITAL COUNCIL

Created by law in 1947 as a legal entity in the Department of Public Health, this Council consists of three ex officio members and 15 members appointive by the Governor. Its function is to advise and consult with the Department in carrying out the administration of the Hospital Survey and Construction Act, a major program involving large expenditures described in considerable detail elsewhere in this narrative. The three ex officio members are:

Director of the Department of Public Health who is also ex officio chairman

Director of the Department of Mental Health
Director of the Illinois Public Aid Commission

The requirements of the 15 appointive members are that there shall be:

- 5 from the field of hospital administration;
- 5 from the fields of medicine, surgery and dentistry;
- 5 with a public interest.

These 15 are appointed for staggered terms of four years each, dating from July 1. It has been the practice of the Director to call a meeting of the Council only once annually. At that time all pertinent applications for grants for the construction of community hospitals, about which all Council members have been apprised in detail well in advance, are considered and action taken thereon.

The officially authorized Advisory Hospital Council was preceded by a hospital advisory committee consisting of 51 persons appointed on July 23, 1945 by Governor Green at the request of Dr. Cross. This committee did an enormous amount of work which carried the hospital construction project through the survey and planning stages, including the adoption of the Illinois Hospital Construction Act, approved August 8, 1947.

Below are listed the names of those who served on the temporary committee, followed by the names of those who have been members of the legally established Advisory Hospital Council, the first of whom were appointed on August 21, 1947.

**TEMPORARY HOSPITAL ADVISORY COMMITTEE APPOINTED JULY
23, 1945**

- Robert S. Berghoff, M.D., Chicago, *Chairman*
- Henrietta Herbolzheimer, M.D., Springfield, *Executive Secretary (Ex officio)*
- Rev. John Barrett, Chicago
- Paul F. Bourscheidt, Peoria
- W. J. Bryan, M.D., Rockford
- Mrs. Kathryn Van Aken Burns, Urbana
- Mrs. Everett Butler, Alton
- Arthur Cantly, Chicago
- Mrs. Frank C. Christenson, Cicero
- Roy Clippinger, Carmi
- Lt. Governor Hugh Cross, Springfield
- Roger W. DeBusk, M.D., Evanston
- James L. Donnelly, Chicago
- Gerry B. Dudley, M.D., Charleston
- E. A. Eckert, Mascoutah
- Carl Erikson, Chicago
- Frederick H. Falls, M.D., Chicago
- Mrs. Walter T. Fisher, Chicago
- Msgr. J. L. Gatton, Springfield
- Hon. Hugh Green, Jacksonville
- Raymond M. Hilliard, Chicago
- Stuart K. Hummel, Joliet
- James H. Hutton, M.D., Chicago
- Victor Johnson, M.D., Chicago
- Chester Lay, Carbondale

S. Levin, Chicago
 Lawrence J. Linck, Hinsdale
 Charles A. Lindquist, Elgin
 Prof. D. E. Lindstrom, Urbana
 Mrs. Laura Lunde, Chicago
 O. W. Lyerla, Herrin
 R. W. McNealy, M.D., Chicago
 Robert W. McNulty, D.D.S., Chicago
 Malcolm T. MacEachern, M.D., Chicago
 Paul E. Mathias, Chicago
 Oscar Nelson, Springfield
 Edna Nicholson, Chicago
 Vernon L. Nickell, Springfield
 Gen. Cassius M. Poust, Springfield
 Edward L. Ryerson, Chicago
 A. L. Sargent, Springfield
 Howard Shaughnessy, Ph.D., Chicago
 Herman M. Smith, M.D., Chicago
 R. G. Soderstrom, Springfield
 Hilda Stein, Carbondale
 Robert Stephens, Springfield
 Walter Stevenson, M.D., Quincy
 Ellen Van Horn, Chicago
 Fred Wanless, Springfield
 Benjamin Wham, Chicago
 John A. Wolfer, M.D., Chicago

**ADVISORY HOSPITAL COUNCIL APPOINTED AUGUST 21, 1947 AND
 THEREAFTER**

Margaret Arnold, R.N., Danville
 Arthur C. Bachmeyer, M.D., Chicago
 Rt. Rev. Msgr John W. Barrett, Chicago
 Robert S. Berghoff, M.D., Chicago
 Francis E. Bihss, M.D., East St. Louis
 Joseph Booton, Chicago
 Fannie Brooks, R.N., Urbana
 Marguerite Brooks, R.N., Moline
 Ray Brown, Chicago
 Paul Burt, Chicago
 May C. Busch, R.N., Salem
 Everett P. Coleman, M.D., Canton
 Carl Erikson, Chicago
 Luther O. German, Springfield
 James R. Gersonde, Chicago
 Edward H. Gibbons, Springfield
 Leonard P. Goudy, Peoria
 Mark Greer, Vandalia
 George K. Hendrix, Springfield
 Raymond Hilliard, Chicago (ex officio)
 James H. Keith, M.D., Evanston
 David M. Kinzer, Chicago
 Robert Levis II, Alton
 Victor S. Lindberg, Springfield
 Mrs. Laura Lunde, Chicago
 Foster McMillan, M.D., Chicago
 Irving H. Neece, M.D., Decatur

John B. O'Donoghue, M.D., Chicago
 Harry Perlstein, Chicago
 Gen. Cassius M. Poust, Springfield (ex officio)
 E. E. Salisbury, Chicago
 Edward C. Thompson, D.D.S., Urbana
 Walter M. Whitaker, M.D., Quincy
 W. R. Williams, Hinsdale
 Mrs. Ann Zercher, Lincolnwood

Ex OFFICIO MEMBERS

Director, Illinois Department of Public Health
 Roland R. Cross, M.D., Director
 B. K. Richardson, Acting Director
 L. L. Fatherree, M.D., Director
 Franklin D. Yoder, M.D., Director—Chairman

EXECUTIVE SECRETARY, ILLINOIS PUBLIC AID COMMISSION

Mr. Raymond M. Hilliard
 Mr. Carl K. Schmidt
 Mr. Garrett W. Keaster
 Mr. Peter W. Cahill
 Mr. Harold O. Swank

DIRECTOR, ILLINOIS DEPARTMENT OF MENTAL HEALTH (*formerly* *Public Welfare*)

General Cassius M. Poust
 Mr. Fred K. Hoehler
 Otto L. Bettag, M.D.
 Francis J. Gerty, M.D.

THE HOSPITAL LICENSING BOARD

The functioning of the Hospital Licensing Board, created in 1953 by a section of the Hospital Licensing Act of that year, is to advise and consult with the Director of Public Health concerning his responsibilities in administering that law. Among other things, his legally required duties include the preparation of all rules, regulations, standards and statements of policy needed to implement, interpret or make specific the provisions of the Hospital Licensing Act. None of the rules, regulations or standards so prepared, however, may become effective without the prior approval of the Board.

Up through 1962, this Board had discharged its obligations with extraordinary devotion, diligence and distinction. Although usually meeting but once a year, the members of this Board have in session gone over all pertinent rules, regulations and standards, and revisions thereof—copies of which were supplied to each well in advance—almost line by line until an agreement on all questionable points had been reached. As a result, the minimum standards required of a hospital for a license in Illinois are at once high, practicable and acceptable generally by all concerned.

The law specifies that the Hospital Licensing Board shall consist of seven members, of whom two shall be members of hospital governing boards; three hospital administrators actively engaged in the

supervision of hospitals; and two, physicians licensed in Illinois to practice medicine in all of its branches. They are appointive by the Governor for staggered terms of three years, dating from July 1. The first appointments dated from July 1, 1943, and were for one, two and three years, to establish continuity of character through overlapping tenure.

Those who have been appointed to membership on this Board include the following:

I. R. Abbott, Decatur
 Elmer E. Abrahamson, Chicago
 Rt. Rev. Msgr. John W. Barrett, Chicago
 Jack B. Edmundson, Carbondale
 Harlan English, M.D., Danville
 George K. Hendrix, Springfield
 Rt. Rev. Msgr. Clement Schindler, Belleville
 Emil O. Stahlhut, Lincoln
 Theodore R. Van Dellen, M.D., Chicago
 George H. Van Dusen, East St. Louis

ADVISORY COUNCIL ON NURSING HOMES

The Advisory Council on Nursing Homes was created in 1957 by an amendment to the Nursing Home Act. Members of the Council, 11 in number, are appointive for terms of four years by the Director of Public Health who is ex officio chairman. The Director is legally obligated to appoint, as Council members, representatives of various interests as follows:

- (a) Illinois Association of Nursing Homes—2
- (b) Illinois Association of Homes for the Aged—2
- (c) Illinois State Medical Society—I
- (d) Illinois State Hospital Association—I
- (e) Illinois State Nurses Association—I
- (f) Illinois Public Aid Commission—I
- (g) State Fire Marshal's Office—I
- (h) Illinois Municipal League—I
- (i) Illinois Association of Supervisors and County Commissioners—I

The duty of the Council, as prescribed by law, is to consult with the Department of Public Health in matters of policy affecting the administration of the "Nursing Homes, Sheltered Care Homes and Homes for the Aged Act," and in the development and revision of minimum standards, rules and regulations promulgated thereunder. Meeting customarily only once a year, this Council has taken a lively and constructive interest in fulfilling its obligations.

Those who have been appointed to represent the various interests, identified above, are as follows:

Arthur A. Almon, Jr., Evanston
 Florence Baltz, Washington
 Rose Bigler, R.N., Cobden

Pearl Bierman, Chicago
 J. Russell Christianson, Oak Park
 Hugh Conn, M.D., Newman
 William J. Cowhey, Springfield
 Laura Curtis, R.N., Peoria
 P. V. Dilts, M.D., Springfield
 Leslie Freeman, Chicago
 Ben Grossman, Chicago
 S. G. Ingraham, Evanston
 Frank Kessberger, Springfield
 John MacWherter, Springfield
 Lois Martin, Tuscola
 Louise Meyer, R.N., Chicago
 Mary G. Montgomery, R.N., Evanston
 Joseph B. Oakleaf, Moline
 Leon C. Pullen, Decatur
 Margaret Tanck, R.N., Carthage
 Rev. Edward J. Reeb, East St. Louis
 Clarence C. Schmoldt, Roselle
 A. F. Schoenig, Herrin
 Rev. B. W. Selin, Chicago
 John J. Twomey, Springfield

THE NORTHEASTERN ILLINOIS METROPOLITAN AREA AIR POLLUTION CONTROL BOARD

Created by a special act of the General Assembly in 1961, this Board is a legal entity in the Department of Public Health. Its prescribed duty is ". . . to render technical assistance and to cooperate with other groups in the field of air pollution . . . provide assistance on air pollution matters to incorporated towns, villages, cities and counties in the Northeastern Illinois Metropolitan Area." It has, with respect to air pollution, the authority to encourage and conduct studies, investigations and research; collect and disseminate information; provide technical assistance and to encourage activity by local authorized agencies; and represent Illinois in any and all plans, procedures or negotiations for interstate compacts.

The Board consists of seven members, the Director of Public Health as *ex officio* and six appointive by the Governor for staggered terms of four years each, after the first appointments. The law requires that of the six appointive members, one shall be a physician, one a graduate engineer, and the others representative of agriculture, industrial management, municipal government and the general public. The technical secretary of the Board, who also functions as its administrative officer, must be a sanitary engineer from the staff of the State Department of Public Health, designated for that purpose by the Director. Thus the Department of Public Health is the executive

and administrative agency of the Board. Members of the first Board appointed include the following:

Jack I. Bergman, *Chairman*
 Edward E. Alt
 Mrs. Enrico Fermi
 Edward V. Henson, M.D.
 Raymond D. Maxson
 William F. Whiteside
 Franklin D. Yoder, M.D. (*ex officio*)

RADIATION PROTECTION COUNCIL

This Council consists of seven members, appointive by the Governor for staggered terms of four years, plus the Director of the Department of Labor and the Chairman of the Commerce Commission who are *ex officio* members. It was created in 1959 by the Radiation Protection Act, the administration of which is vested in the Department of Public Health and assigned to the Division of Sanitary Engineering.

It is the duty of the Council to assist in the formation of, and to review, the policies and programs of the Department of Public Health, as related to the administration of the Radiation Protection Act. It has authority, moreover, to employ technical and other personnel without regard to civil service laws or the Personnel Code of the state. It may meet as often as deemed necessary by the chairman who is elective from the membership.

The law specifies that the appointive members of the Council shall be selected on the basis of demonstrated interest in and a capacity to further the purposes of the Act and who broadly reflect the varied interests in and aspects of atomic energy and ionizing radiation within Illinois. Persons who had served on the Council up through 1962 are as follows:

Ralph S. Bradley, Springfield
 Roy F. Cummins, Springfield (*ex officio*)
 Robert R. Donnelly, Springfield (*ex officio*)
 Roger A. Harvey, M.D., Chicago
 Robert J. Hosterlik, M.D., Chicago
 James W. Karber, Springfield (*ex officio*)
 Robert S. Landauer, Sr., Ph.D., Chicago
 Professor Ross J. Martin, Urbana
 Byron J. May, D.D.S., Chicago
 George R. Perrine, Springfield (*ex officio*)
 John E. Rose, Sc.D., Lemont
 Ormas G. Smith, Chicago

PLUMBING ADVISORY BOARD

The duty of this Board, which was created by law in 1957, is to consult with and advise the Department of Public Health on matters of policy concerning the promulgation of a minimum code of standards for plumbing and the fixtures, materials, design and installation methods of plumbing systems. Of the seven members authorized, four

are appointive by the Governor and must be representative of plumbing contractors, journeyman plumbers, agriculture and the public; one each appointive by the Speaker of the House and the President of the Senate, respectively; one ex officio, a specified professor of engineering from the faculty of the University of Illinois. Members of the Board in 1962 were:

Senator W. Russell Arrington
 John K. Dorsey
 Professor Richard S. Engelbrecht (ex officio)
 Edwin Gumm
 Representative Walter S. McAvoy
 A. L. Sargent
 Harry S. Shaw

STATE SANITARY WATER BOARD

In the State Sanitary Water Board, originally created by law in 1929, is vested the power to cause the abatement of inimical pollution in the streams of Illinois and to prevent such pollution by the regulation of facilities for the disposal of waste matter into the waterways. The Department of Public Health is made by law the agency through which this broad power may be exercised. Formal hearings, the results of which are subject to review by the courts, and the courts are the mechanism through which the Board is authorized to bring about compliance with its orders when not voluntarily implemented.

The Board consists of the State Directors of Health, Agriculture, Conservation and Public Works and Buildings, all ex officio, and two members appointive by the Governor, representative of the industrial interests of the state and of municipal government. The chief sanitary engineer of the Department of Public Health is, ex officio, the technical secretary of the Board and its executive officer. As a matter of practice from the beginning, the Director of the Department of Public Health has been elected chairman of the Board. All appropriations for accomplishing the work of the Board are made to the Department of Public Health although in recent years they have not been identified in the appropriation bills.

In practice the Board takes into consideration such matters as are brought to its attention by the technical secretary and bases its action on information provided by him. Few state agencies have operated more effectively than the Sanitary Water Board machinery in achieving the results for which they were created.

As a result of the work done under the authority of the Sanitary Water Board, enormous improvement in the sanitary quality of the waters of the streams and lakes in Illinois has taken place since 1929. By the same token, immense improvement in the sewage and waste disposal facilities of the state has come about in the face of growing difficulties brought on by a rapid growth of the general population, of urbanization and of industrialization.

The Sanitary Water Board has no office space assigned to it. Meetings are held irregularly, usually in the office of the Director of Public Health. The names of the ex officio members appear among lists of state officers in numerous publications. Those who have represented industry on the Board since its creation in 1929, in chronological sequence, are:

Clarence J. White, Beardstown
 B. C. Heacock, Peoria
 Ousley Brown, Springfield
 R. W. Gothard, Springfield
 C. S. Boruff, Peoria

A. L. Sargent of Springfield, secretary of the Illinois Municipal League, has been the representative of municipal government up through 1962.

The two appointive members have a legal term of four years and are eligible to remain in office until successors are appointed and qualify.

OHIO RIVER VALLEY SANITATION COMMISSION

The Ohio River Valley Water Sanitation Compact, a contract agreement, and the Ohio River Water Sanitation Commission, an activating agency, came into existence for the purpose of causing the prevention, abatement and control of pollution of the rivers, streams and waters in the Ohio River drainage basin. The states of Illinois, Indiana, Kentucky, New York, Ohio, Pennsylvania, Tennessee and West Virginia entered into the agreement and established the Commission through legislative action of each. Illinois ratified the compact in 1939.

The Commission, on which each of the eight states is represented by three members, and the Federal government by one, maintains an operating organization, headed by a sanitary engineer, with headquarters offices in Cincinnati. Each state is obligated to pay an annual assessment for financing the work. For the biennium beginning July 1, 1961, Illinois appropriated \$14,040 for this purpose. Each state has enacted laws which repose in the Commission the necessary authority for discharging its obligations.

The three representatives on the Commission from Illinois consist of the Director of Public Health, who is an ex officio member, and two members appointed by the Governor for staggered terms of six years. The appointive members who have served on the Commission are:

C. W. Klassen, Springfield
 J. J. Wolman, Bloomington
 W. H. Wisely, Champaign
 Maurice Gosnell, Lawrenceville

NON-OFFICIAL ADVISORY COMMITTEES AND AGENCIES

From time to time over the years, the Director, occasionally acting through the Governor, has appointed non-official advisory committees in order to obtain expert advice on particular problems or programs. These consisted of persons having specialized knowledge, experience or skills bearing on the matter under consideration. They have been appointed for indefinite terms, served without compensation and met irregularly as circumstances dictated. Members of such committees have made extremely valuable contributions toward the development and execution of administrative policies and programs.

The identification of only five of these committees is available for recording here. Four are associated with the bureau of epidemiology in the Division of Preventive Medicine and the other with the Division of Milk Control. They are the Polio Technical Advisory Committee as constituted in 1962; the Revision of Rules Committee as constituted in 1959; the Advisory Committee on Hazardous Substances as constituted in 1959; the Advisory Committee on the Prevention of Accidental Poisoning as constituted in 1959; and the Advisory Committee on Grade A Milk, 1962. The names of the members of each of these committees at the time indicated are listed below:

POLIO TECHNICAL ADVISORY COMMITTEE, 1962

- S. L. Andelman, M.D., Chicago
- Jackson P. Birge, M.D., Rock Island
- W. L. Crawford, M.D., Rockford
- John B. Hall, M.D., Chicago
- Mark Lepper, M.D., Chicago
- George F. Lull, M.D., Chicago
- E. A. Piszczeck, M.D., Forest Park
- Edward Press, M.D., Evanston
- Herbert Ratner, M.D., Oak Park
- John L. Reichert, M.D., Chicago
- H. J. Shaughnessy, Ph.D., Chicago
- Albert Wolf, M.D., Chicago

REVISION OF RULES COMMITTEE, 1959

- S. L. Andelman, M.D., Chicago
- Jackson P. Birge, M.D., Rock Island
- Herman N. Bundesen, M.D., Chicago
- J. W. Chapman, M.D., Jacksonville
- W. L. Crawford, M.D., Rockford
- L. L. Fatherree, M.D., Champaign
- John B. Hall, M.D., Chicago

Herbert Miller, M.D., Winnetka
 J. T. O'Neill, M.D., Ottawa
 H. J. Shuaghnessy, Ph.D., Chicago
 Roger F. Sondag, M.D., Carbondale
 H. W. Spies, M.D., Chicago
 E. M. Thompson, M.D., Clinton
 Felix A. Tornabene, M.D., Aurora

ADVISORY COMMITTEE ON HAZARDOUS SUBSTANCES, 1959

Robert L. Ackerly, Washington, D.C. (*ex officio*)
 Walter M. Ashley, Chicago
 C. R. Chapman, Chicago
 Joseph R. Christian, M.D., Chicago
 Chester L. French, M.D., St. Louis, Missouri (*ex officio*)
 J. H. Hawke, St. Louis, Missouri
 W. S. Jessop, Chicago
 Robert E. Mason, Jr., Chicago
 Paul Maton, Chicago (*ex officio*)
 C. J. Nowak, Chicago
 Edward F. O'Toole, Chicago
 Edward Press, M.D., Evanston
 Donaldson F. Rawlings, M.D., Springfield
 Melvin Rembe, Springfield (*ex officio*)
 B. K. Richardson, Springfield
 Norman J. Rose, M.D., Springfield
 Stefan M. Stein, Chicago

**ADVISORY COMMITTEE ON THE PREVENTION OF ACCIDENTAL
 POISONING IN CHILDREN, 1959**

Joseph R. Christian, M.D., Chicago
 W. L. Crawford, M.D., Rockford
 J. Keller Mack, M.D., Springfield
 Paul Pierce, M.D., Alton
 Norman J. Rose, M.D., Springfield
 John D. Stull, M.D., Olney
 S. G. Thompson, M.D., Urbana
 Walter M. Whittaker, M.D., Quincy

ADVISORY COMMITTEE ON GRADE A MILK, 1962

George Baker, Moline
 Ermin Carter, Decatur
 C. V. Christiansen, Chicago
 Willard J. Corbett, M.D., Rockford
 Clyde Fruit, Edwardsville
 Gilbert Gibson, Chicago
 Orville Isaacs, Sullivan
 Orran Keach, Rose Hill
 Floyd M. Keller, Chicago
 J. C. McCaffrey, Chicago
 A. L. McWilliams, Chicago
 George Maxwell, Urbana
 Fred Nonnamaker, Chicago
 H. W. Peters, Chicago
 O. H. Ryan, Tonica
 Paul Scherschel, Chicago

Bernard Szidon, Peoria
 M. G. Van Buskirk, Chicago
 L. K. Wallace, Bloomington
 Louis Weiner, Chicago

STATE-WIDE PUBLIC HEALTH COMMITTEE

The State-wide Public Health Committee, mentioned elsewhere herein, was organized in Springfield on June 17, 1942, as a quasi-independent promotional arm of the Department of Public Health. A chairman and a co-chairman, both appointive by the Governor, are the titular head of this Committee, serving without salary, while from the outset an employee of the Department has served as executive secretary and all basic expenses have been borne by the Department.

With membership connections throughout the state, the Committee was effectively active in the enactment of the county health department law in 1943 and thereafter has been aggressive in promoting the establishment of full-time county and multiple-county health departments. Numerous meetings conducted by the Committee have constituted a fruitful forum through which knowledge about preventive medicine has been widely disseminated and a climate favorable to the improvement of local public health services created. The administrative work of the State-wide Public Health Committee was a function of the Division (later bureau) of Public Health Education until 1954 when it was transferred to the Division of Local Health Services. Those who have served as officers of the Committee are as follows:

CHAIRMAN

Frederic C. Woodward, Vice-President Emeritus, University of Chicago, June 1942-July 1, 1944
 Benjamin Wham, Past President, Illinois Bar Association, July 1, 1944 to date (1962)

CO-CHAIRMAN

Mrs. Guy Tawney, Urbana, 1942-1947
 Mrs. Walter Stevenson, Quincy, 1947-1954
 Mrs. Margaret Cowdin, Springfield, 1954-1957
 Mrs. Orville Foreman, Jacksonville, 1957-1961
 Mrs. John Armstrong, Champaign, 1961-

EXECUTIVE SECRETARIES

Mrs. Margaret Cowdin, 1942-1946 and 1949-1954
 E. L. Wittenborn, 1946-1949
 Harold K. Fuller, 1954-

QUARTER CENTURY CLUB

On December 7, 1949, with Governor Stevenson and about 200 employees of the Department of Public Health on hand in the ballroom of the Leland Hotel in Springfield, the Quarter Century Club was organized in order to publicly and officially express appreciation to

those who had been employed by the Department continuously for 25 years or more. Membership in the Club has increased from 23 at the first meeting to 65 after the induction of 12 new candidates at the fourteenth annual meeting on January 11, 1963. Membership in the Club has represented all levels and all categories of the Department's personnel, including one Director, Dr. Cross. The Club has been a factor in the cultivation of morale and a spirit of cooperation among the personnel.

ILLINOIS ASSOCIATION OF BOARDS OF HEALTH

At a meeting of representatives of local boards of health in Springfield on September 24, 1953, called by Dr. Cross on recommendation of Dr. Charles F. Sutton, chief of the Division of Local Health Administration, the Illinois Association of Boards of Health was organized. Officers elected at that time were:

President: Ralph P. Peairs, M.D., President, McLean County Board of Health
Vice President: Mrs. Helen Kirschke, Secretary, DuPage County Board of Health
Secretary: Mrs. Hubert Bohleber, President, Egyptian (tri-county) Board of Health

Present at the meeting were 18 members of 11 county and multiple-county boards of health, plus 15 staff representatives of 13 county and multiple-county health departments, including five not represented by board members. Dr. Cross and his staff were on hand to encourage the formation of the Association with the end in view of cultivating vital interest among board members by emphasizing their official responsibilities and acquainting them with the opportunities and problems confronting full time local health departments.

Since that time the Association has met annually in Springfield, in response to invitations of the State Department of Public Health, with steadily growing attendance by board members. In recent years it has been the practice of this Association to meet jointly with the Illinois Association of Medical Health Officers which was organized in 1949. Both are an indirect outgrowth of the county health department movement in Illinois and together have constituted an excellent medium of communication with the State Department of Public Health.

Governor Otto Kerner addressed the joint meeting of these two associations on November 26, 1962.

ILLINOIS ASSOCIATION OF MEDICAL HEALTH OFFICERS

The Illinois Association of Medical Health Officers was organized in 1949 as an instrument through which full-time medical health officers could express themselves forcefully concerning such matters as legislation, policies, practices, standards, rules and regulations which had a direct bearing on public health administration in Illinois. Dr.

Winston Tucker, health commissioner of Evanston at the time, was the first president and Dr. S. N. Mallison, then a district health officer of the State Department of Public Health, was the first secretary. Since that time this Association has participated extensively in the work of various advisory committees to the State Department of Public Health and in this and other ways has exerted an active influence on the public health affairs of Illinois. It meets annually with the Association of Boards of Health, except for business sessions. From the outset the membership has been heavily weighted with staff members of the State Department of Public Health.

THE ILLINOIS PUBLIC HEALTH ASSOCIATION

The Illinois Public Health Association came into being on December 5, 1940, as an outgrowth of an annual conference for public health workers which had been a function or project of the State Department of Public Health since the early twenties. This annual event, which had no organized status and no elected officers, had reached the point where it attracted an attendance ranging upwards of 600. The desire of many of those who attended to give substance to group opinion about public health matters and to establish the annual conferences on a more stable foundation than the vagaries of state government with changing administrations, led to the organization of IPHA. After the adoption of a constitution and by-laws at the meeting on December 5, 1940, with about 200 on hand, officers were elected as follows:

President: Dr. Arlington Ailes, Health Officer of LaSalle, Oglesby and Peru

Vice President: B. K. Richardson, Senior Administrative Officer, State Department of Public Health

Secretary-Treasurer: Dr. Howard Orvis, Health Officer, Winnetka
EXECUTIVE COUNCIL:

Howard J. Shaughnessy, Ph.D., Chief, Division of Laboratories, State Department of Public Health

Dr. R. C. Farrier, Health Officer, East St. Louis

Mabel McClanahan, R.N., Supervising Nurse, Joliet

Alice Miller, R.N., Tuberculosis Institute of Chicago
and Cook County

Dr. J. Howard Beard, Health Officer, University of Illinois

Dr. E. A. Piszczeck, Health Officer, Cook County

Prof. H. E. Babbitt, University of Illinois

Paul Krueger, Milk Sanitarian, Chicago Board of Health

At the organization meeting, 153 persons applied for membership at \$1 each. Thereafter the State Department of Public Health arranged annual meetings primarily for health officers and members of boards of health, devoted principally to administrative matters, while the Association arranged annual meetings devoted more to scientific and general public health subjects. The Association grew

and prospered until, with more than 1100 members with the fee up to \$2, it became the strongest affiliate of the American Public Health Association.

OTHER HEALTH ORGANIZATIONS

The Department of Public Health has maintained close and friendly relations with the various voluntary health agencies. It is traditional for the Illinois Tuberculosis Association to elect the State Director of Public Health and the chief of the Division of Tuberculosis Control to membership on its board of directors. Similarly the chief of the Division of Hospitals and Chronic Illness is elected to the board of directors of the Illinois Heart Association. Personnel of the Department hold membership and are active in the various organizations of their respective professional and specialty attainments.

WABASH VALLEY INTERSTATE COMMISSION

The Wabash Valley Interstate Commission is a promotional agency created in 1959 in conformity with a compact agreement between Illinois and Indiana. Its function is to promote the balanced development of the Wabash Valley, including plans and programs for the conservation, development and proper utilization of water, land and related natural resources. The Commission consists of 14 members, seven from each of the two states.

While there is no requirement that the Illinois Department of Public Health be represented on the Commission, its interests were recognized by Governor Stratton in the appointment of C. W. Klassen, chief sanitary engineer of the Department, as one of the first commissioners from Illinois.

HEALTH CONDITIONS AFTER 1927

As measured by death rates, public health in Illinois in 1961 was far superior to that which prevailed in 1927. This was particularly true of the young in the population. The death rate among people under 45 years of age in 1961 was considerably less than one-half what it was in 1927, while for those between one and 25 years of age it was only about one-fourth of the 1927 rate. For people between 45 and 65 years of age, the death rate in 1961 was about two-thirds of that in 1927. Among people over 65 the improvement was measurable but much less.

As reflected by the prevalence of the more serious transmissible diseases, the improvement was also impressive. In an estimated population that was up from 7,323,000 to 10,258,000, case reports of ten notifiable diseases and deaths therefrom in 1927 and in 1961 were as follows:

	CASES		DEATHS	
	1927	1961	1927	1961
Diphtheria -----	6,272	11	649	0
Malaria -----	134	1	63	0
Measles -----	41,016	16,931	292	20
Poliomyelitis ---	480	26	103	1
Scarlet Fever --	11,787	5,645	172	7
Smallpox -----	1,236	0	3	0
Syphilis -----	13,415	6,543	1,049	64
Tuberculosis ----	14,622	4,021	5,482	496
Typhoid Fever---	1,294	39	174	1
Whooping Cough	11,124	677	308	1
 TOTAL -----	 101,380	 33,894	 8,295	 590

The most gratifying improvement, perhaps, was that among child-bearing women and infants. The risk of fatal outcome from the complications of childbirth went down almost to the vanishing point during this period, the number of deaths among women attributed to puerperal causes having declined from 743 in 1927 to 61 in 1961, giving rates of 55.6 and 2.6 per 10,000 live births for the two years, respectively. The number of deaths among infants under one year of age went down from 8605 in 1927 to 5757 in 1961 and the rate per 1000 births declined from 64.4 to 24.3.

Improvement in mortality from various specific diseases between 1927 and 1962 is illuminating. There were no deaths attributed to

diphtheria, malaria or smallpox in 1961 whereas 715 were charged against these diseases in 1927. Likewise polio, typhoid fever and whooping cough together accounted for three deaths (one each) in 1961 against 585 in 1927. To tuberculosis was attributed 496 deaths in 1961 against 5482 in 1927 and syphilis was charged with 64 and 1049 in these two years, respectively. The decline in the death rates from these diseases was, of course, even more striking than the decrease in fatalities, owing to the considerable increase in population.

The decrease in mortality rates from various non-transmissible causes was remarkable. Data for some of these, including pneumonia, are as follows:

DEATHS PER 100,000 POPULATION—ILLINOIS

	1927	1961
Accidents, all forms.....	75.0	42.7
Appendicitis	16.2	1.0
Diabetes	19.9	15.3
Pneumonia	72.7	36.1
Homicide	10.0	5.3
Suicide	14.9	9.3

The nearly complete elimination of fatal risk from appendicitis doubtless is the result largely of improved medical skill and techniques. The availability and use of antibiotics and specific drugs accounted for the decline in mortality from pneumonia. Mortality from diabetes has declined only moderately because, most likely, the strict self-discipline required of diabetics for successfully controlling the disease is not always imposed and because of failure to detect the disease early enough. The sharp decline in mortality from accidents, including traffic mishaps, has resulted, no doubt, from law enforcement, educational training, installation of safety devices and mechanical improvement. The mortality rate from suicide reached a peak of 18.4 in 1931 and 1932, and thereafter trended downward until 1944 at 9.9, since which time it has varied only slightly. The reason may relate to prevailing economic conditions. The homicide rate, somewhat similarly, got up to 10.8 in 1933, gradually declined to a low of 3.9 in 1943 and since that time through 1961, has not exceeded 6. The factors influencing these two imponderables, suicide and homicide, while obscure, are doubtless mental and emotional in nature. The lower rates in recent years therefore suggest less tension in the population generally than was the case prior to 1940.

On the unfavorable side, the mortality rate from heart diseases more than doubled between 1927 and 1961, rising from 200.1 to 432.7 per 100,000 population. The increase, however, took place entirely among people over 64 years of age. Among younger people, especially those under 45 years of age, a substantial decline took place. Heart diseases accounted for somewhat more than 43 per

cent of all deaths in 1961 against approximately 18 per cent in 1927. Thus heart diseases had become by 1961, far and away the chief killer of human beings in Illinois.

The death rate from cancer likewise followed an upward course, rising from 102.9 in 1927 to 168.2 in 1961. Here again there was a decline in the rate among persons under 65 years of age. The upward trend in the general death rate from cancer slowed down after 1945, reached a peak of 171.7 in 1956 and thereafter fluctuated narrowly. Cancer was responsible for about 17 per cent of all deaths in 1961 against about 9 per cent in 1927.

The increasing effectiveness of control measures over communicable diseases has brought into prominence during recent years the long term, or chronic ailments, as the principal challenge of the public health and medical professions. This is not to say that the transmissible diseases have been conquered in Illinois—far from it. The venereal diseases, for example, are still widely prevalent although the effectiveness of modern treatment prevents most of the serious complications which they formerly caused. Infectious hepatitis, which has increased sharply since 1950, German measles when pregnant women are involved, certain forms of meningitis and encephalitis, while not widely prevalent, are particularly stubborn unsolved problems which require a great deal of attention. Tuberculosis is far less prevalent than formerly but is still a major problem. Constant effort, moreover, is required to retain the ground gained against the epidemic diseases which have come to be rarities—diphtheria, poliomyelitis, smallpox, typhoid fever, etc. The big problems and challenge, however, are the chronic ailments.

The reduction or amelioration of chronic ills is not, however, the only emerging challenge to the health officer in this new kind of world in which we live. Indeed, it may be quite secondary to environmental sanitation in preserving the public health at or above the level already attained. Technological advancements which appear likely to continue and become more complex, urbanization, industrialization and the population explosion, so called, have a profound effect, potentially dangerous, on the environment, particularly as to foods, water and air. Potential pollutants of these necessities range from exhaust fumes to atomic fallout and from domestic sewage to nuclear waste products. Management of these affairs so as to produce good and not harm to mankind requires the most exacting operation of control systems administered by highly trained and skillful technicians. In this situation, the health department, embracing a wide range of high-level technically trained personnel, has a major role to play. Living healthfully today requires more intelligence and a better disciplined society than ever before and this will be even more so in the future. Likewise every person is far more dependent on other people than at any previous time. Thus morality and integrity are much more important to health and safety than heretofore.

APPROPRIATIONS AND GRANTS

Prior to 1936, the ordinary operational expenses of the Illinois Department of Public Health were paid for by state money appropriated for that purpose. Grants from the Federal government had been accepted, however, at irregular intervals, for extraordinary services concerned with venereal diseases immediately after World War I, a searing drought in the southern counties in 1930 and a devastating flood of the same area in 1937. The Department had also exercised supervisory control over several large-scale job-making projects financed directly by the Federal government as an anti-depression movement.

A change took place in 1936 when the Department began the practice of accepting Federal grants on a regular basis, made available by the Social Security Act for the improvement and expansion of on-going public health programs. Since that time the Department has also accepted and administered Federal grants for emergency services, such as obstetric and pediatric care of the wives and babies of certain military personnel during World War II, and for hospital construction. From a modest beginning, these Federal grants increased steadily in magnitude until by 1962 they amounted to only slightly less than the total sum of state money appropriated to the Department. Here are the data on funds available to the Department from all sources for bienniums beginning on July 1, 1927, 1935 which includes the first regular Federal grants, and 1961.

APPROPRIATIONS AND GRANTS

Biennium	State Money	Federal Money	Total
1927-1929	\$ 1,289,384	\$ 0	\$ 1,289,384
1935-1937	1,280,628	471,952	1,752,580
1961-1963	19,538,579	17,444,079	37,157,658

Thus, it may be seen, the amount of money available to the Department of Public Health for the biennium beginning in 1961 was more than twenty-fold greater for the biennium beginning in 1935. Both state and Federal governments contributed almost equally to this phenomenal growth in resources.

The increase in state money appropriated to the Department resulted very largely from actions initiated outside and independent of the Department of Public Health. Organizations outside state government were responsible for special appropriations for the control of tuberculosis, cancer, rheumatic fever and for the care of prematurely born babies. A member of the General Assembly, Representative Edward Saltiel, was almost solely responsible for the law, and appropriations relating thereto, which require blood tests of candidates

for marriage and of pregnant women. It may be said, therefore, that the growth of public health services, involving larger and large appropriations, resulted from public demand.

Rapid as it has been, however, this growth in expenditures and services appears not to have kept pace with public demands. This conclusion seems justified by the fact that voluntary contributions to the various non-official health agencies make up in aggregate a sum fully as large as the appropriation of state money to the Department of Public Health. The income of these non-official agencies, moreover, has climbed steadily concurrently with the rising appropriations to the Department of Public Health. The published record of income from fund raising efforts in Illinois in 1961 of six of the larger of these non-official agencies is as follows:

American Cancer Society, Illinois Division.....	\$2,291,555
Chicago Heart Association	1,325,900
Illinois Heart Association	632,766
Chicago-Cook County Tuberculosis Institute	829,788
Illinois Tuberculosis Association	1,897,000
Illinois Association for Crippled Children	1,211,816
National Foundation (March of Dimes).....	491,068
	<hr/>
	\$8,679,893

The appropriations of state money to the Department of Public Health and grants accepted from the Federal government, exclusive of funds for the construction of hospitals and other facilities, for each biennium beginning with 1927 and ending with 1963, are shown in the accompanying table.

MONEY AVAILABLE TO THE DEPARTMENT OF PUBLIC HEALTH*

Biennium	Appropriations	Grants	Total
1927-1929.....	\$ 1,289,384	\$ 0	\$ 1,289,384
1929-1931.....	1,319,722	0	1,319,722
1931-1933.....	1,433,442	0	1,433,442
1933-1935.....	1,188,588	0	1,188,588
1935-1937.....	1,280,628	471,952	1,752,580
1937-1939.....	1,792,674	1,270,944	3,063,618
1939-1941.....	2,313,921	1,589,570	3,903,491
1941-1943.....	2,263,921	2,245,158	4,509,079
1943-1945.....	3,232,850	5,622,332	8,855,182
1945-1947.....	4,212,955	3,646,419	7,859,374
1947-1949.....	5,846,409	4,157,981	10,004,390
1949-1951.....	12,114,970	4,182,496	16,297,466
1951-1953.....	17,673,758	3,117,364	20,719,122
1953-1955.....	17,168,900	2,244,551	19,413,451
1955-1957.....	17,319,150	4,732,537	22,051,687
1957-1959.....	18,334,615	3,311,687	21,646,302
1959-1961.....	19,481,601	3,467,186	22,948,787
1961-1963.....	19,538,579	4,865,207	24,403,786

* Does not include \$17,547,825 of state appropriations and \$63,309,547.65 of Federal grants for the construction of hospitals, sanatoria and other capital improvement facilities.

FULL-TIME LOCAL HEALTH DEPARTMENTS IN ILLINOIS 1962

<i>County and Multiple County</i>	<i>Address</i>	<i>Established by Referendum</i>
Adams County Health Department	Quincy	1944
Cook County Department of Public Health (Started in 1940 as a unit in the Welfare Department and made independent in 1945 by resolution of Board of County Commissioners)	329 South Wood Chicago 12	1945
DeWitt-Piatt Bi-County Health Department	Clinton	1946
DuPage County Health Department	Wheaton	1944
Effingham County Health Department	Effingham	1946
Egyptian Health Department (Gallatin-Saline-White Counties)	Harrisburg	1950
Franklin-Williamson Bi-County Health Department	Johnston City	1958
Fulton County Health Department	Canton	1946
Jackson County Health Department	Murphysboro	1948
JoDaviess County Health Department	Galena	1948
Lake County Health Department	Waukegan	1956
Lawrence County Health Department	Lawrenceville	1958
Lee County Health Department (Started in 1943 by resolution of County Board)	Dixon	1946
McLean County Health Department	Bloomington	1945
Macon County Health Department (Not Organized)	Decatur	1962
Montgomery County Health Department	Hillsboro	1945
Morgan County Health Department (Started in 1944 by resolution of County Board)	Jacksonville	1946
Peoria County Health Department (Started in 1945 by resolution of County Board)	Peoria Heights	1946
Quadri-County Health Department (Hardin-Johnson-Massac-Pope Counties)	Golconda	1946
Shelby County Health Department	Shelbyville	1946
Tri-County Health Department* (Alexander-Pulaski-Union Counties)	Cairo	1958
Will County Health Department (Established in 1945 by resolution of the County Board of Supervisors with a tax levy authorized by referendum in 1946)	Joliet	1946

* Established by vote in 1946 as Alexander-Pulaski Health Department. Union County added in 1958.

FULL-TIME LOCAL HEALTH DEPARTMENTS IN ILLINOIS 1962—CONCLUDED

<i>City and District</i>	<i>Address</i>	<i>Established by Referendum</i>
Champaign-Urbana Public Health District	Champaign 54 West Hubbard Chicago 10	1937
Chicago Board of Health	Decatur East St. Louis	1937
Decatur Department of Public Health		
East Side Health District (Canteen-Centreville-East St. Louis- Stites Townships)	Evanston	
Evanston Department of Health	LaSalle	
Hygienic Institute (Lasalle-Oglesby-Peru)	Oak Park	
Oak Park Department of Public Health	Peoria	1937
Peoria Department of Health	Rockford	
Rockford Department of Public Health	Oaklawn	1946
Stickney Township Public Health District		
Winnetka-Glencoe-Kenilworth-Northfield Villages Health Department	Winnetka	

ACKNOWLEDGMENTS

The preparation of this history was undertaken as the direct result of the interest and initiative of Dr. Franklin D. Yoder who placed at my disposal for the purpose the facilities of the Department of Public Health. It was a timely project in that the Department had experienced a phenomenal growth during the period under review and considerable change had taken place in the character of its functions and in the character of many public health problems; the end of an era, as it were, and the beginning of a new one. I had been an officer in the Department throughout this period and thus had firsthand knowledge of much that transpired.

In assembling the information set forth in the narrative, I interviewed the division and bureau chiefs and other personnel of the Department, and of other agencies, and consulted numerous official publications and documents which included the following:

1. Annual Reports of the Department of Public Health
2. *Illinois Health Messenger*
3. *Illinois Health News* and *Illinois Health Quarterly*
4. Biennial Reports on State Appropriations
5. *Illinois Revised Statutes*
6. *Illinois Vital Statistics Reports*
7. Minutes of Meetings of the State Board of Public Health Advisors
8. Financial and Personnel Records of the Department of Public Health
9. *Public Health in Illinois*, by the American Public Health Association, June 1942
10. *Management Survey of Illinois Department of Public Health*, by the U. S. Public Health Service, June 1940
11. Grants-in-Aid, U. S. Department of Health, Education and Welfare, 1962
12. *Tuberculosis Control Facilities in Illinois*, by the Illinois Legislative Council, 1944
13. *Illinois Public Health Organization*, by the Illinois Legislative Council, 1954
14. *Organization and Functioning of the State Government* (Report of the Commission to Study State Government), 1950
15. Miscellaneous records of the Department of Public Health

A substantial amount of the records of the Department of Public Health, especially of correspondence, which would have provided a good deal of interesting and colorful detail for this volume, had been destroyed as a result of recommendations that stemmed from a general survey of state paper work and office procedures, made in 1956 by the National Records and Management Council of New York City.

To Dr. Yoder for his interest and guidance, to Miss Doris Smith for her cheerful and tireless secretarial assistance and to the many others whose help and courtesies made easier and pleasant the writing of this book, I express my grateful appreciation.

B. K. RICHARDSON

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